

1923

✓ *Amalia*

Cara Rosa

1923. 1. Pleasant Hill, Blue Mts.,
Jamaica. 3700 to 4400 feet.

July 19, 1923. (R.) All taken in
juncus grass, low succulent
herbage and bush along trail
toward Cinchona through riviera,
coffee and bananae. Paratettix
dead broken leaves on ground.

juv. Schistocerca in more succulent
veg. juv. Aspilota ^{yellow} sweeping
from same. Imant. mutat. surpt.

Orth. 90

25000 away

Other insects. 37

1923. 2. Bitouan St. Helens Gap &
Morris Gap, Blue Mts., Jamaica.
4780-4980 feet. July 19, 1923. (R.)
no Orthoptera.

Orthopt. Other ins. $37 + 5 = 42$

1923. 3. Morris Gap, Blue Mts.,
Jamaica. 4980 feet. July 19, 1923.
(R.) In dead leaves on forest floor
Choriphyllum (!). From epiphytic
bromeliads, Cairblatta reticulosa
- Imant. Aspilota
- Neoblattella sp. ? (2♀) - juv.
Blattids - Clownesia bratini from

grassy banks of creek.

$$11 + 10 = 21$$

$$\text{Other insects } 15 + 37 = 52$$

1923.4 Betw. Low edge of forest
- St. Helena Gap, Blue Mts., Jan.
4400 - 4700 feet. VII.20.1923. (R.)

1 juv. *Urechis* beaten from soaked
forest undergrowth.

$$1 + 21 = 22$$

$$\text{Other insects } 7 + 52 = 59$$

All beaten exc. butterfly.

1923.5 Same as 1923.1 but
elevation only to 3800 feet. VII.21.1923
In grass and banana litter (R.)
dead leaves and dead & live
blossom clusters.

Proctos 1 ♀ under dead banana trunk.
Carthatta ret. 2 from blossom. ^{Ado. & juv.} Neob.

ditersa Ado. & juv. from ditto.

Demnapt. relicta. Under stones & about
bases of bananas in ground
litter. Ado. & juv. *Stegm* juv. in
muddy patches. *Ich. incripta* juv.
in ditto. *Conceph.* juv. ditto.

Microcut. juv. ditto. richardsoni
(?) from bases of banana leaves
only. Jamaicanus juvs only,
numerous in bases of banana
leaves & in banana blossoms.
Apparently very variable in
coloration. Gryllus ad. & juv. from
ground litter among bananas.
Orocharis numerous in banana
blossoms, very active.

$$67 + 22 = 89$$

$$\text{Oster insects } 9 + 59 = 68$$

1923. 6 Same as 1923. 3 but July
21, 1923. (R.)

Neobl. grossbecki 2 ♂ & ♀, 1 juv.
in dead bases of tree fern fronds
and in shreddy bark of tree with
reddish bark of that type. Cryptop-
tilum ad. ♂ & juv. under bark as
above. Beetles in bromeliads.

$$7 + 89 = 96$$

$$\text{Oster insects } 8 + 68 = 76$$

1923.7 Same as 23.4 but VII.22.1923
R., Beating along border of forest,
dead wood work in forest and
scratching in dead leaves.

Caril. punctulata 1 sp. from wild
ginger head. Woh. new sp. from
dead wood in forest. Woh. detrita
from (and from bromeliad) bromeliad.
Andria sp.
dead wood. Axis morpho juv.
1 juv. from hollow in log largely
occupied by abandoned termites
nest. Sarnyia-like phasm. beaten
from grass and Crachin-like plant
on ^{slope} face of trail. juv. phasmids
similarly beaten. Exprosa sp.
juv. from trail border, sweeping.
Cryptoptilum 1 from bromeliad
1 from under dead wood. 1 juv.
Pseudophyllid from sweepings.
juv. Ancharoid from head of
wild ginger.

$$19 + 96 = 115$$

$$\text{both other insts. } 43 + 76 = 119$$

1923.8 Vicinity of Cinchona, Blue
Mts., Peru. Elev. 4400 feet. VII. 23. 1923.

(R.) No Orthoptera.

no. other than Orth. $14 + 119 = 133$

1923.9 Same as 1923.1. VII. 23. 1923.

(R.) Beating and sweeping.

Phasmod ¹⁵ ~~from~~ ⁱⁿ brush along trail.

Stagmomantis ^(juv) in grass & brush

no. ditto, in overhanging
vegetation along trail. juv. Schist.
in in grass.

$15 + 115 = 130$

Other insects $5 + 133 = 138$

1923.10 Same as 1923.4 VII. 23. 1923.

(R.) Pichneocerus in bromeliad.
juv. Jamaicana in ditto. New
stallid ditto. apothecia-like juv.
in blossom of wild ginger. Other
juv. pyllid in bromeliad.

$6 + 130 = 136$

Other insects $15 + 138 = 153$

1923.11 Same as 23.1 but

elev. 3700 - 3750 feet. VII. 24. 1923.

(R.) Beating weedy fields
and vine tangles on cut bank

along trees. juv. Hagmona
in woods. large Bacteria like
for ^{before} from one variegata. ditto
juv. Microcephalus Microcephalus
in woods. juv. Chist. inscripta
ditto. juv. Psitt. variegata from
one variegata variegata.

- Pseudosynchlora VII. 23. 1923
at ^{in room} light at night.

~~1923.12~~ 16 + 136 = 152

Others. 9 + 153 = 162

1923.12. Same as 1923.5. VII. 24.
1923 (R.) in banana blossoms,
leaf litter and bases of leaves
of same only.

Funct. relicta 1 at base of banana
tree in litter. Caril. reticulosa
in blossoms only. Moth. detrita
ditto. Cryptophilum in blossoms
& under leaf sheaths. Prochilus
in fracher portions of blossoms
almost entirely, always in
blossoms. juv. purpurascens
in blossoms only, ^{no adults} richardsoni
ids. chiefly in ~~in~~ under leaf

measles, not occasionally in
streams. Hornoseph. in
leaf litter.

$$51 + 152 = 203$$

Other in 1 + 162 = 163

1923.13 Same as 23.1 Elev. 3660 feet.
VII. 24. 1923. (R.) Under house.

Aglaothorax adults + juv. under
bark of shade trees. Jamaicana,
Pichnechus - Procharis ditto.

Usurilioid juv. from vine tangles
along trail.

$$18 + 203 = 221$$

1923.14 Same as 1923.4 but date
VII. 24. 1923. (R.) All from bromeliads
near jct. of Pleasant Hill trail &
Clydesdale - Cuichona trail, unless
otherwise indicated.

Neobl. grossbecki, both sexes.

" detrosa. Both sexes.

new species 18.14. Uphesia n.sp.

18.14. Procharis pygmaea

Adults + juv. Choripentura sp.

♀ from mechleria tree,

Swept.

$$27 + 221 = 248$$

Other no. $24 + 163 = 187$

1923.15 Same as 23.4 but VII.25.1923
(R.). In lower section of forest
entirely. Sweeping, bark from
trees, tree fern examination,
dead logs, etc.

Aglaothorax ad. juv. from hollowed
bases of dead tree fern fronds &
under bark. *Cryptoptilus* from
bark & dead wood. *Oreochoreis*
juv. Bark & dead wood. *Acantthis*
type, from under bark of dead
log.

$$11 + 248 = 259$$

Other no. $8 + 187 = 195$

1923.16 Same as 1923.5 VII.25.1923
(R.) In banana blossoms,
litter & roadside vines &
rush.

Neobl. diffusa in banana
blossoms. *Carib.* ditto.
Conoclype in weeds. *Amimorpha*
jam. Put in case.

juv. *Orthopneustus* in one tangle
 along trail. *Uranidius* juv.
 in tangle side one tangle -
 not persistently in adults
 without success. *Richiops*
 in *varuna* ^{under} *rossi* & *varuna*
 leaf *rossi*. *varuna* all
 juv. in *rossi* & *varuna*.
Uranidius in *varuna* *rossi*.

$$32 + 209 = 241$$

Other ins. 5 + 196 = 200

1923. 17 West slope of Sir John Peter
 Grant Peak, Blue Mts., Jamaica.
 Elev. 5700 feet. VII. 26. 1923. (R.)
 In dense ridge type of forest. Heavy
 undergrowth, mosses everywhere
 and limited number of epiphytic
 bromeliads. *Dermapt.* *Pelicia* under
 bark. *Neoblatt.* *prostrata* from
 bromeliad. Juv. *N. detrita* (?) from
 ditto. Juv. *Cariblatta* (?) bilineate
 insect, from ^{upper} bark only.

$$9 + 291 = 300$$

Other insects 1 + 200 = 201

1923.18 New Haven Jap, Blue
Mts., June. Elev. 5600 feet. VII.26.1923
(R.) In ramuliado and under
bark. *Neobutea* (?) juv.
under in ramuliado. *Camblatta?*
vitinate under. from under
bark. *Orocharis*, apparently
diff. run sp. found in bananae.
from ramuliado.

$$5 + 300 = 305$$

$$\text{Other ins. } 2 + 201 = 203$$

1923.19 Same as 23.4 but
VII.21.1923. (R.)

Clavistris juv. from trail side
tangle. *Cryptoptilum* from
under bark in forest. *Uliga-*
canthopus ?; ditto; particularly
reddish
under bark of one tree.

$$5 + 305 = 311$$

$$\text{Other ins. } 9 + 203 = 212$$

1923.20 Peasant's hill house,
Blue Mts., June. Elev.
3500 feet to 3800 feet. 1.1.
1923 (R.)

Ullia 1 ad. - from crypt from
trail side vine tangles.

Butterflies, up in coffee, sphingids
about same as these also
respired. Other notes &
certain non-respiring caterpillars
at night at night.

Peris. misra, in *misra* at night.
amazonica in ditto (!)

$$511 + 4 = 515$$

$$\text{other no. } 20 \text{ } T \text{ } 212 = 232$$

1923. 21. Same as ^{1923. 11} 1923. 5 but VII. 28. 1923

(R.) Old field, trailside tangle
+ vines, ~~banana blossoms~~

~~dead leaf insect, also under~~

~~stems~~ *Stagmus* juv. in old
fields. *Chloristia* ad. + juv.
in old field + roadside weeds.

Schistocerca juv. in old field.

Stelposchisma juv. in corn of

cut bank. *Emoceph.* in old field.

Microgaster from tangle in trail

side bank. *Amazonia* juv. from
ditto

$$13 + 310 = 323$$

$$\text{Other no. } 0 + 232 = 232$$

1923. 22 Same as 1923.5 but
VII. 28. 1923. R. In banana
blossoms - dead leaf bases,
also under stones.

Proctos under dead banana
blossoms in round. can't get.
Occasional in banana blossoms.
Proctos under stones, also - juv.
Diptera under ground
under stones, also - juv.

Ichneumon generally under
dead leaf bases, rarely in
blossoms. *Gnathochor* juv.
in blossoms. *Orocharis* common
in banana blossoms, but part
seen taken. *Gryllus* under
dead banana litter on ground

$$47 + 328 = 375$$

$$\text{Other no 5} + 238 = 243$$

1923. 23, Same as 1923.4 but
VIII. 28. 1923. R. *Cryptophilum*
and *Eligantopora* under bark,
chiefly the reddish bark of
Saccharum. *Aphidius* juv.
under bark. *Orocharis* under

work on another species of
tree.

$$9 + 375 = 384$$

$$\text{Other no. } 13 + 40 = 53$$

1923. 24 Same as 1923. 9. but VII. 29.

1923. 3 juv. Hellia in vine
tangles. w. Amecynoptera
ditto, also Conocoph. juv. Schist.
1 juv. Amecynoptera from old field
vegetation.

$$7 + 384 = 391$$

$$\text{Other no. } 38 + 256 = 294$$

1923. 25. Same as 1923. 3 but
VII. 29. 1923. in bromeliads ^{dead tree fern} and ^{found them}
under bark (almost entirely of
Vaccinium). Neot. grossbecki
numerous in bromeliads &
dead tree fern stem bases. New
sp. rel. to Neot. 1 ♀ + 4 juv. all
ex bromeliads. Euphyas (?) sp.
1 juv. in bromeliad, extensive
branch disclosed no more.
Abundant of yellow, 1 ♀, jumping
on litter (of forest floor). Arachis
sp. juv. in bromeliad.

$$20 + 391 = 411$$

$$\text{Other ins. } 16 + 294 = 310$$

1923. 26 Pleasant Hill House,
Blue Mts., Jamaica. Vm 29. 1923.

(R.) 1st by net. etc. sphingids, these
Gryllus only ~~these~~ and
new species of Scorpiot 1♂
 $2 + 411 = 413$

$$\text{Other ins. } 14 + 310 = 324$$

1923. 27 Same as 1923. 5 but

VII. 30. 1923. Beating in old
fields. juv. sch descripta, also
saw one adult, cocooned. Conocryptus
saw. juv. Ornithoid swept.

$$6 + 413 = 419$$

$$\text{Other ins } 2 + 324 = 326$$

1923. 28 Same as 1923. 3, but
bromeliads only. New ^{VII. 30. 1923.} juv
1 ad. 1 juv. 1 ad. ♂ Scorpiot relicta.

$$3 + 419 = 422$$

1923. 29 same as 1923. 28
but under bark of Vaccinium
and in dead leaf litter

along trail. New genus 1 ad, under
bush. *Not. ~~sp.~~* ditto.

Carib. ~~retic~~ in dead leaf litter.
Not. ~~sp.~~ (?) 1 ♂ in dead leaf litter.
Warrant ~~pyling~~, with sexes,
numerous in dead leaf litter
in small area, unnoticed else-
where.

$$24 + 422 = 446$$

1923.30. Pleasant Hill House,
Buenos Aires, Jan. VII. 30. 1923.

(I.R.) *V. ~~sp.~~* at dusk in
juncos. Remainder attracted
to lights at night, except + beetles.

$$6 + 446 = 452$$

$$38 + 326 = 364$$

Anisomorpha ♂ & ♀ in coite walking
on steps in light. *Periplaneta*
am. in kitchen: juv.

L. americana sleeping on flowers.

Cariblatta (?) 1 ♂ attracted
to light.

1923.31 Pleasant Hill
House, Jamaica. VII.31, 1923
(R.) At night, attracted
to light unless otherwise
indicated. Camptoproctus taken
with flash in garden (autumn
chewed off by Lichenorhynchus). Lichenorhynchus
ditto. Hapithus ditto
Crometia 38 + juv. all on
jars in garden.

$$17 + 452 = 469$$

$$\text{Uthman} .43 + 364 = 407$$

1923.32 Mona great House,
St. Andrews Parish, Jamaica
Elev. 550-600 feet. VIII.3-4, 1923.
(R.)

Sphingonotus / Schist. inscripta
on dry hills, with only thorny
vegetation in large part leafless.
Sphingonotus in bare spots. Hapithus
of swept from green low
bush. Theridion at
light at night in house.
Moths all at light about

houses

$$6 + 469 = 475$$

$$\text{Other ins. } 52 + 407 = 459$$

1923.33. Beach at S. end
of Long Mt. St. Andrew Parish,
Jamaica. 5 m. E. of Kingston.
VIII.5.1923. (R.)

~~Sphingonotus~~ on strong waste leading
to sea. Numerous, ^{often} crouching -
not infrequently failing to fly
when swept. juv. *E. symplece*
under beach trash.

$$28 + 475 = 503$$

$$\text{Other ins. } 1 + 459 = 460.$$

1923.34 Juápiles, Costa Rica.
Elev. 984 feet. VIII.11.1923.

(R.) All material attracted
to lights at "El Salvador," except

$$\text{Orth. } 2 + 503 = 505$$

$$\text{Other ins. } 58 + 460 = 518$$

Rays "leopard" moth on
wall.

1 ad. moth. *Zapoteca* & 1 grasshopper
blatt. taken in garden under a

fallen
cacao
leaf

1923. 3.5 La Encirica near Guápiles,
Costa Rica. VIII. 12. 1923. (R.)
Elev. 1000 ft
near many forest about 1/2 mile N.

Grainroad. various situations.
Psalis unus 1 in large hollow tree.
Banded egg-like mesobasis type and
again cinerea ditto under dead
w. a decay in vegetation. Lev.
rubra type from epiphyt. bromeliads,
ditto epicampa sp. 1 spec. Pseudo-
phyllodromia 1 on leaves of no
growth in sunny sun. w.
Pseudomops 2 Pseudoph. ditto under
decay in leaves. Scaria 1 damaged
sp. on leaves of vines, etc in sunny
openings, - partly brilliant green in
life. Chingilia many dead
clashes on forest floor. Eudacnax
puckered on leaves of a tree &
in grass in open. Lev.
Lev. Nautia 1 General adult
on ground under low growth.
Peromacris trigona adult ♂ & ♀
on low shrub in open spot.
Pseudophasma from low
undergrowth. Taken in guide.
Leptomeris torosa numerous

1923.36. Same as 1923.34
but VIII. 12. 1923. Ut lights.
Amnogyllus in house.

Microcentrum resting on wall,

$$2 + 565 = 567$$

$$\text{Other in } 57 + 547 = 601$$

1923.3 Same as 1923.35 but
VIII. 13. 1923.

Neoblutella valued in fair no. in
branchio. sch. ?, [spinescent]
near morio in leaf litter. Large
sp. same as 1923.30, in branchio.

Pep. infescent sp. l. under eggs and
near branchio in run. green-type
sp. l. auto. large with spotted
uv. Microtis into l. chironom
into. Microtis into l. chironom
into. Microtis into l. chironom

Pseudoph. minus ? l. in foliage
flushed. Leptomeria thopora on
foliage. Microtyphus on
foliage. ps. M. usiformis l. ad.
pus. ditto. These latter three
not in evidence except when seen
is hiding, then they appear.
Drophus large species numerous on

1923.38 Same as 1923.34 but
VIII.13.1923.

No Urch. (626)

Other no. 94 + 626 = 720

1923.39 Same as 1923.38 but

VIII.14.1923. Many fresh very int.

Paria americana 1 large juv. under

dead wood. Spandix pectinosa?

(has no spines, 1 ad. ditto. Epilampra-
pale species in ground. Epil.

sp. repus. by me juv., under dead

wood. Lemnolavina two ♀♀, one

found dead, under dead wood.

Crochus entus 1 ♀ in foliage.

Crane crinita 1 juv. sleeping in

foliage. Ulita? 1 juv. in foliage.

Jodacris starens 3 ads. in

foliage of shrubs. Microtylopteryx

pusiformis 1 juv. Chaetura cyanea

same in foliage. Junco sp. in

grasses and under logs.

Urch. 20 + 626 = 646

Other no. 10 + 720 = 730

1923. 40 Same as 1923. 34 but
VIII. 14. 1923.

Paehlina resting in light
shade. *Stagnomantis* on wall.

$$2 + 646 = 648$$

$$\text{Other in } 70 + 130 = 800$$

Stagnom. " *manipalo* " *de Juan* "

1923. 41 Same as 1923. 35 but

VIII. 15. 1923. Many forest, drier than

1923. 39. *Psalis* sp.? juv. 2. in much

under dead wood. *Parasporatta calenki*
1 ♂ from branch cut from felled tree.

Juv. *Neoblatt. nahua* from branch cut.

Pseudophyll. peruviana very active.
from foliage. *Heimibetia*

2 under dead wood. 1 ♀ *Stagnomantis*

nahua type, swept from foliage. 1 ♀

Mimox *japax* swept from foliage of

undergrowth. 1 nearly adult *Xerosoma*

glyptomeris as *M. japax*. 3 ♂

Pseudophasma minus flushed.

marked down in undergrowth.

Emera sp. ad. + juv. in foliage, taken

by individual effort. *Emasota* sp. ♂ ♀

+ juv. in foliage in light woods.

juv. *Libinia* in shade of undergrowth.

Rhachinera sp. juv. in foliage.

This story, however, is in
fact in fact and numerous
species are known to be in
the area. At present, however,
a restricted area of some cases,
in fact, by itself, 75, of them.
Thymus quies is near. Copiphora
intrusus 2 ♀, separately, swept
from foliage of many undergrowth.
Eurytomus 2 in 1, mostly, mostly
in foliage, and some. Phylus sp.
7 ♀, in individual, some from foliage
under some in cases. Pteris
intrusus, 1 ♀, only 1 ♀, resting
on leaf of some tree in undergrowth.
Just swept from Pseudophyllid (14)
which down in center of formation
at from tree - height of some. Some
around about 5 feet. Scopiorus
sp. from omnivorous. 2 juv. Minixia
swept from foliage of undergrowth
around glade. 1 juv. 1 juv. 1 juv.
under dead wood. Red brown
about 1/2 inch, with black and
brown, under some wood. Copiphora
in fact 1 on some in fact in
foliage. Some, some, some
species of tripipidus numerous

in some specimens, very active
and some of the more active
underneath, in some, in the
specimens, very active. number
of specimens in some specimens.
some yellow specimens in some, or large
in some, some in some, green one,
some, some, some, some, some, some,
in some specimens.

specimens in some specimens.

$$82 + 645 = 727$$

$$727 + 105 = 832$$

1923.42. Same as 1923.34 but
VIII.15.1923.

Ochromophora ilicinate prov.
resting on light wires near bulb.

2 Dacnospoda taken in
garden.

$$3 + 730 = 733$$

$$\text{Other ins. } 75 + 832 = 907$$

1923.43 Same as 1923.35 but
VIII.16.1923.

Polio amer. adult in dead wood-
dew stored with friceps. Pseudoph.
peruviana in foliage of some growth.

Juv. Pseudoph. ditto. Microps juv. ♀
jumping about in low dead twigs &
stems in ground. Libinia sp. swept
juv.

from brush. One of two other
phasmids similarly taken.
Scania from foliage. Plectrocnemia

1♂ 1♀ and Uchistotellix 3 ads. all
taken in small area of dead wood,
much trash on ground. Eumecurus
on foliage. Utrix 1 ad. on foliage,
rather hidden. Muretylop. Utrix
on lower foliage. M. fus. Utrix
ditto, Utrix. Leptomerinthopora
common locally in open places, on
wedy growth, ads. + juvs., active.

Rhachicnema few, adults very
scarce, all restricted to one small
area, active to such a extent insect.

Musca sp. 1 juv. on foliage.

Utrix miniatura 1♀ on wedy foliage
in open spot. ? Utrix astaricensis
numerous in one spot, on foliage,
exceedingly active. Drophus 2

specimens occasional on foliage,
generally hidden. Sphyrnites

1♂ 3♀ a tree, colony on ground
in dead, wedy + foliage - not much
like Utrix but cannot jump
as far - 1st stage.

Phlegis 1p on foliage. P. Biastis
not from low ridge. Both
new species of Antropha
on low ridge. Antropha
species of Antropha represented
by one pair in each sex, taken in
low ridge.

$$68 + 733 = 801$$

$$\text{series no. } 27 + 807 = 834$$

1923.44. Same as 1923.34 but
VIII. 16. 1923.

Princl. australis on wall of
mine in light. Bilimata prev.
Isanophora flying about light.

$$2 + 801 = 803$$

$$\text{Catherins. } 75 + 834 = 907$$

1923.45 Same as 1923.34 but
VIII. 17. 1923.

$$\text{Cath } 803$$

$$\text{Catherins. } 54 + 907 = 961$$

1923.46. Same as 1923.35 but
VIII. 18. 1923. Both heavily shaded
forest and open spots, latter
with low growth and little
shrubby.

Ancistragaster sp. 1 ♀ under dead
wood. Parasparatta calvanti 1 ad.
1 ♀ in bromeliad on fallen tree.

Anisotaxis 2 sp. (?) all from under
dead wood & debris of same.

Pseudophyllodromia ^{pa.} _{in} foliage, active.
Pseudop. juv. ditto. Anaplecta, near
decipiens, running on ground among
twigs & dead leaves. Ep. tanypa p.p.

+ juv. under log & dead wood. Nyctibra
sp. juv. under dead wood. Megalobatta

1 juv. ditto. Rhincoda sp. 2 ♀♀

or 2 Hemibatta, both under

dead wood. Spanomyx (?) 1 ♀ nearly
or quite adult swept from undergrowth.

Pseudophasma minus 1 ♂, flying.

Scania 1 ad + juv. on foliage, exceedingly
active. Allotettix swept from ^{on} dead leaves
& twigs in more open spots. Cumastus

on foliage, very active. Abila sp. 2
juv. in low undergrowth on ground.

Clemilia ads. in more open spots in
weed-like vegetation. Leptomeristis-

prara common in all types of
undergrowth, moderately active
but not hard to catch. Both species

of Microstylum occasional on foliage, fuscifrons probably the more active jumper. Rhachiceros sp. ad. few, but one juv. seen.

Chromacris 1 ♂ seen - taken from foliage. Hellia bimaculata 1 pair, 1 other ♂ escaped, exceedingly active - jumping long distances in a single bound, on foliage. Hellia secundopicea 1 ♀, all seen, on foliage. Chrysopodius 1 ♀, all seen, on foliage. Tetramerus (1) 1 ♂, on foliage, all seen. Urophus 2 species, well distributed.

foliage & on ground, not active. Verniocephalus sp. 1 ♂ on foliage. Eriolus sp. 1 ♂ resting on foliage. Phlugis short-winged species few. Phlugis long-winged species 1 ♀ on foliage. Scoparius like pseudophyl. 1 ♀ from foliage. Cocconotus sp. 1 juv. ♂ in ~~♀~~ coiled up ~~rearing~~ ^{the} leaf of a palmita-like plant.

Symphaloxiphus scarce on foliage, several ♂, 1 ♀ taken. Green Cyrt-xipha ditto. Brown Cyrt-xipha

more numerous on foliage. *Ctenopoma*
sericeum only immature seen, in low
ground - on ground solely in dark
forest, abundant.

$$127 + 803 = 930$$

$$\text{Other no. 41} + 907 = 948$$

1923. 47 Same as 1923. 34 but
VIII. 18. 1923.

no fish

$$\text{Other no. 7} + 948 = 955$$

1923. 48 Rio Toro Amarillo,
near (west of) Quápiles, C.R.
Elev. about 1000 feet. VIII. 19. 1923.
(1), in thickets of caño blanco
on banks of winding torrent, and
about beds of old channels, in vine
and mata tangles and in overgrown
clearings. *Anaplecta* sp. sighted on
my neck. *Stegomantodes* sp. - phasmids
juv. except from under logs. *Pseudo-*
phyllodromia sitting on foliage. *Allo-*
stictus + *Parastictus* swept from damp
ground in trail + from grassy spots.
Distillula very scarce, 1 ad + juv.
in mounds + masses, close to river.
Chicnoda 1 ♂ from under log in
jungle, remained motionless when

exposed. *Uromia* not common in
single. *Triclistus* centurio 1 ♂
in old field. *Leptocryptus*
in air numerous in single.

Microgaster very numerous, ♂ only
seen & taken in same. *Microgaster*
very common in all rocky areas.

W. *Microgaster* males numerous,
about 2 males represented.

Microgaster deep red species,
in many areas & grass, also scarce.

Microgaster numerous, very active.

Microgaster very active.

Microgaster very active p. 1 in single.
Microgaster very active 1 ♂ in same.

$$60 + 750 = 990$$

$$40 + 750 = 1000$$

1923. 4. 1. - *Microgaster*, p. 1. VIII. 19.

740. in *Microgaster* of *Microgaster*, *Microgaster*,
races & *Microgaster*. *Microgaster* in.

Microgaster in. *Microgaster* in.

Microgaster in. *Microgaster* in. *Microgaster* in.

Microgaster in. *Microgaster* in. *Microgaster* in.

Microgaster in. *Microgaster* in. *Microgaster* in.

Microgaster in. *Microgaster* in. *Microgaster* in.

exceedingly active, though running

more than jumping in your net.

$$\text{Orth. } 66 + 440 = 1056$$

$$\text{Orth. no. } 9 + 1001 = 1010$$

1923.50 Same as 1923.34
but VIII. 19. 1923.

No orth.

$$\text{Orth. no. } 82 + 1010 = 1092$$

1923.51 Same as 1923.35

but VIII. 20. 1923. *Hypoclypeus* sp.

1 ♀ swept near ridge. *Pseudophylla*

peruviana on foliage, about six seen.

Pseudoph. 2 juv. with pale median

line, running on dead fallen tree.

Enaphletus near *despicens* swept from

foliage. *Enaphletus* near *truncatus*

1 ditto. *Epilampus* near *aztecus*, 1 ♀

under dead log. *Pseudoprosopius* minus

1 flying in shady forest. *Libinia curvata*

(?) 1 nearly adult, swept from undergrowth.

Jelly. with pop-eyes and undulate

med. carina, 1 on ^{thin vegetation on} ~~dead~~ ground in open

spot in nest. *Isotegia* with cand.

peruviana or *peruviana* interhumeral

membranous, two on foliage in nest.

Jelly. with hippo-like skin high

interhumeral inflexion. seen on

ground in open spot. *Peralittix* numerous

on ground in open spot. *Ocarina* in

fair numbers on foliage and on
fallen tree trunk. *Cynodactylus*
also a few occasional on foliage.

Chaenocera a few ad. ♂ on
foliage, only a few & long wings.

Microgaster & *Microgaster* numerous
& common general in distribution,

on foliage. *M. leucoides* not seen,
on foliage. *Leptomeria* & *Leptomeria* of

general distribution. *Allesia* with
anguineus present, not seen &

taken, on foliage. yellow & red *Allesia* (?)
very local, all seen taken, on foliage.

Allesia, a single female in low

undergrowth. *Urophys* one taken, in

low undergrowth. *Neocnocephalus*

many, one ♀ on foliage. *Perispermata*

Copid nova sp. with acuminate aotij.

no ♂, on foliage. *Jun*, very

very pseudophyllid etc. no ♂ & ♀,

on foliage. *Scoparius* sp. 1 ♂ & ♀ in un-

rolled leaves of low plant. Large

Coccyzus in unrolled leaves of low

plant. *Conica* *remota*,
Conica *remota* numerous in low undergrowth,

chiefly in shade, very few adults,

quite adult. *Estus* *pyre* 1 ♀ taken

from which *C. unguiculata* like
 I suspect, *C. unguiculata* in
 foliage. Very and *Pipteryx*
 on in fallen tree trunk. Gray &
 from *Pipteryx* small in ditto.
 In some species of *Cyrtosiphia* in
 four numbers in foliage. Two new
 species of *Cyrtosiphia*, also numerous
 numerous, etc. *Cyrtosiphia* & *Cyrtosiphia*
Cyrtosiphia 17 only, in foliage. *Gryllacris*
 juv. swept from foliage.

$$93 + 1056 = 1149$$

$$\text{Other in. } 41 + 1092 = 1133$$

1923. 52 Same as 1923. 34
 but VIII. 20. 1923.

$$\text{Orth. } 1 + 1149 = 1150$$

$$\text{Other in. } 58 + 1133 = 1191$$

1923. 53 ^{excl. 1 re VIII. 24. 1923} As 1923. 34 but VIII. 24. 1923

All at light at house! One
 magnificent *Ratiblattella* with
 disk orth. with black lateral.
 One *Neoblatt.* different from
 any taken before. One *Chorisomena*,
 one ♀ *Parocnethus*, one *Cyrtosiphia*
Cyrtosiphia with dark lateral lines.

$$5 + 1150 = 1155$$

$$\text{Other in. } 45 + 1191 = 1236$$

1923.54 Same as 1923.35; not
VIII. 22. 1923.

Parasparattia culicoides in bromeliads
a filled tree, 1♂. & ♀. ? Echinopsalis
setata 1 juv. ♀, in ditto. Antrethia sp.
One ♀, ditto. Pseudophya, occasional
on foliage. Neoballidia sp. one, ditto.
Anoplecta bilineata type, one swept
from low growth on ground in relatively
open spot. Anoplecta species with pale
lateral borders, ditto. Epilampra
near cythra from under dead log. Epilampra
large species with finely
mottled pattern, flying in forest, marked
down to resting place on hanging
creeps & swept. Rhincoda 1 ♀ under
dead wood. Pycnosculoides one from
under dead wood. Pseudophasma
menius 1, not flying. Scania occasional
on foliage, few with cuneate pronotum.
Paratettix sp. in one bare spot of ground.
Duxalis crucivittis 1 ad. in med-like
growth. Cremastax sp. one from foliage.
Atila juv. on ground & in very low
growth. Leptomerismophora in fair
numbers through undergrowth.
Rhachicera scarce, one adult
♂ & one juv., on foliage. Microstelo-
pteryx proformis rather general

but not common. M. beside occas-
ional in under bush, active.

Ulmus, occurring in the more
open spots. There I catch A. bellia
minutula & A. maculata. on
foliage, species very scarce. Red
curd species numerous on foliage.

capensis (?) sp, one male, on
edge. Remarkable spined
skeleton, two males, one swept
from surface of moss coming
down tree trunk, the other swept
from dirty heavy bush vegetation
about thirty feet away from loc. of
first specimen.

[illegible]

80 + 100 = 1230

other no. $29 + 19 = 1218$ 1220

1923.55 Same as 1923.34 but
VIII. 22. 1923.
no Orth.

$$\text{Orth. ins. 11} + 1220 = 1231$$

1923.56 Colombiana, C. R.

Elev. about 400 feet above sea-level.
VIII. 23. 1923 (R.)
In weeds about pineapple
fields. 1 juv. Cyphulella + 1 juv.
Orth.

$$1 + 1230 = 1231$$

$$\text{Orth. ins. 6} + 1231 = 1237$$

1923.57 Arismina Siding,
Rica Vieja, betw. Mercedes
and Quácimo, C. R. VIII. 23. 1923.
(R.)

Symphylorhynchus in weeds along
railroad track. ~~Symphylorhynchus~~
~~juv.~~

$$4 + 1231 = 1235$$

$$\text{Orth. ins. 3} + 1237 = 1240$$

1923.58

Quácimo, Costa
Rica. Elev. 500 feet. VIII. 23. 1923.
(R.) In high grass + weeds about
balsa plantation. Crochus,
Microtylopteryx fus. formis +
Uranidia in heavy weeds. Several
specimens of Cyrtorhynchus and Symphylorhynchus.

1923. nigrellus

Xiphos on foliage of weeds. Paratettix on bare ground of path.

$$18 + 1235 = 1253$$

$$\text{Other ins. } 14 + 1240 = 1254$$

1923.59 Same as 1923.58 but
VIII. 23. 1923.

3 specimens of Cyrtorhiza with dark
cut. line.

$$3 + 1253 = 1256$$

$$\text{Other ins. } 21 + 1264 = 1281$$

1923.60 Same as 1923.55 but
VIII. 24. 1923.

1 ♀ large Dipteryx swept from low
growth in heavily wooded forest.

Two small sp. of same genus as 1923.55.
One small near Dipteryx - swept
from low growth. One small near
low growth. One small near low growth.
One small near low growth. One small near
low growth. One small near low growth.
One small near low growth. One small near
low growth. One small near low growth.
One small near low growth. One small near
low growth. One small near low growth.

Microgaster line apil. 1 juv. ♂ 1 ♀ running
in dead leaves - series in ground.

Cynocentrus in under dead
wood. Charismura one running
in foliage of low corn. Mionys
rapax? One ♂ in foliage. Zuleke

Neopterygia, one found in leafy
nest. Pseudophasma minimus
one flying in nest. Pseudophasma
sp. with 1st line of legs & wings,
killed. Blacus 1 large male, swept
from low bush. Hymen 1 Dacnusa
1 flying in tangle of low plants
& eggs. Phygadeuon terrestris, covered
with wasp-pins, creeping in tangle
vines, leaves & moss hanging about
bushes. One color ^{man} protection
this insect is little but of marvellous
& it was detected solely by slight
motion. Scardia relatively common
in low vegetation foliage & also on
the ground. Hippodamia-like Pterigida
one on bare ground. Series of other
species of Pterigida in bare or
relatively bare spots in open area in
woods about felled trees. Truxalis
minimus 1 f in low vegetation in
dark forest. Camisia infrequent
in more open areas. Stila 1 f &
1 juv. in nest undergrowth.
Amastax uncommon in foliage
in more open spots. Leptomeria
generally distributed in dark sections

very many species. R. nassica is
very common, in some open
places. Microdypteryx proformis
generally distinct. M. tuberosa
is numerous & local, but not
partial to one type & present more
than another. Heliccia miniatura 1 ♀
and 1 ♂ 1 ♀ of other Heliccia, in
foliage of undergrowth. Uranolacania
in low grass in sunny spot.
Uranus sp. 1 ♀ 1 ♂. in short
run low grass. Copiphora with
long acute body, 1 ♀ short run
low undergrowth. Phylloxera, short-winged
sp., 1 ♀ run low under growth. few.
Pseudophyllodes run foliage & low
colleg leaves. Scopion, 2, run
low undergrowth. Stenobothrus
scopion sp. 1 ♀, with resting
on upper surface of broad leaves of
undergrowth. ? Blastus sp., 1 large
♂ in most undergrowth (fruiting
stage). Uranus sp., 1, running
in low grass. Encoptia
run, in fair numbers, nearly

1923.62 Same as 1923.35 but
VIII. 25, 1923. *Unapelta* near *vicinosa*
surpt from top of white scoria
- no. *reflexa*. *Microtyphlopteryx*
no. + *Rhachicera* hopping on
- near - ground. *Agropyron* line
+ *Helig* in trail on ground.

$$10 + 584 = 1394$$
$$\text{unus unus} \quad 7 + 1353 = 1362$$

1923.62 Same as 1923.34 but
VIII. 25, 1923.
No *Unch*.

$$\text{Unus unus. } 9 + 1362 = 1371$$

1923.63 Guadalupe, several
miles N. E. of San José, Costa
Rica. Elev. ^{3970 feet} ~~4000~~ feet VIII. 29, 1925.
(Rahn + Johnston)
Along road + roadside, in *poró* trees
and under stones + small bromeliads
on *poró* tree road borders.
1 ♂ *Skalistes inopinata* - 1 ♂
Mitrasura reflexa each in
an individual dry + small
bromeliad in *poró* trees along
road. *Unapelta* near
accipiens 1 spec. from grass
along road-side drain (surpt).
Eurycotis triolleyi locally in

numerous along road under
uprooted stumps & logs. Pyc-
nosceloides in similar
situations & associated but
not as frequent. Uchotettix
numerous along bare cuts of
road. 1 nearly adult Settegidea
~~may~~ nicaraguae taken in
same situation, no more encoun-
tered. Uphulella numerous in
grass of road side & potreros.

Neuromenia 1 ♂ swept from
overhanging vegetation on roadside
bank. Cnecrophalus very scarce
in grassy patches along road & in
potreros. Humat. pseudophyllid
from same situation as Neuromenia.
Rhipiteryx from road bare tracks
& cut banks of road, adults extremely
scarce. Humat. fryllus under
dead log.

$$74 + 1394 = 1468$$

$$\text{Other no. } 57 + 1371 = 1428$$

1923. 64 Along the Rio Maria

Aguilar, near San Jose, C. R.

Elev. ^{3640 feet} about same as San Jose.

VIII. 30. 1923. (R. - Tristán.)

In rotten bananas, Eurygaster broleyi
adults & imm. in banana, instars, also
one juv. Pycnosculoides. In rolled
dead leaves hanging in bushes many
Metacoelus ruficeps. 1 Proctos. Euphorbia

type from same place. Latrodectus
nearcticus. imm. ditto (all ♀♀). Choroso-
neura sp. 1 from same place, 1 swept

from low vegetation (a pair), juv. of
several species of Blattellidae swept
from foliage, from dead leaves in
similar situations. 2 juv. of very
robust mantid, swept from low foliage (prob.
Urocybus heapsi). Stagmomantis

sp. 1 juv. swept. Ditigidea nicaraguae
with wings, ♂♂ just some adult, ♀♀
not adult, in bare road, bare sp. to
along river bank & even in grass, numerous.
Uchrotaetia sp. 1 same ♂♂ in road.

Truxalis versicolor 1 ♂ from
low weedy growth. Urophylloides
numerous in ditto.

Colpocleptus truncatus 1 juv. brown ♂,
1 juv. green ♀ hopping along base

a large rock, near muddy
 vegetation, extensive search failed
 to disclose more, either adults
 or juvs. Rhynchoderma sp. 1 juv.
 swept from fringe of low trees along
 Run, extensive search failed to
 show others. Uniceris prob.
apicalis 1♀ swept from low weeds
 & grasses just back from river,
 extensive search failed to show
 any more but 1 juv. which escaped.
Scutiger sp. 1 juv. in low
 meadows. Uremia 1♀ under shade
 of heavy shrubbery. Aidenma
artica 1 ad. & many juvs. in all
 stages (very small ones strikingly
 & brilliantly colored), numerous
 in muddy places. Isara prob.
intermedia ^{occasional} ~~in~~ in both
 green & brown phases, in weeds &
 grasses on bank above river.
Drophus sm. species, 1♂ 1♀, ditto.
Exochus rufus, ♂ & a number
 of juvs. one dead larva hanging
 in mesh & swept from fringe
 of bushes. 1 ad. Pipistru, small
 red. Conopsea sp. local
 in muddy ground.

$$99 + 1468 = 1567$$

$$\text{other no. } 115 + 1428 = 1543$$

1923. 05 La Palma, C.R. Elev.
(anemid) 4900⁵¹⁰⁰ feet. VIII. 31. 1923. (R. & T.)

Work done in drizzling rain under
dead logs, under bark of stumps
& logs, in bromeliads & moss on
same & other living trees. Anaplecta
decipiens - type. in fair numbers
in moss & under iron bark. Pale
anaplecta from moss. juv. Plectoptera
from bromeliads. juv. pale bodied
orthocentrus from under logs. Euryctes
pale sp. 1 juv. from bromeliads. Schmiedeknechtia
2 species under bark & dead wood.

Calotampa sp. 1 ad & 2 juv. ditto.

Many species (which we already have)
of 1 ♀, from under dead wood. B. lleya
of 5 ♀ & 3 juv. all under dead logs.

Cteniscus sp. 1 ad & 2 from under
bark & moss. Anachura 2 ♂ 1 ♀,
ditto. Third species of Proclitus 1 ♀
ditto. Uroletix sp. one in
wet meadow. S. intellix scarce in
ditto. Microstylus pus, form
1 ♀ in wet meadow (!). 2 immat.
Uranotaenia pyllidis
from under dead logs.

$$45 + 1567 = 1612$$

$$\text{Uranotaenia} \quad 15 + 1043 = 1058$$

1923.66 Same as 1923.65
but IX.1.1923 (R.-T.) Work
done largely in digging same
as yesterday, but also in recently
cleared land and under of many
mountain mist. Country very broken
and full of hills. Lutia sp. 2 nearly
adult under dead wood. Phryganox
sp. 1 ♀ ditto. Ischnoptera rufa occid.
fairly numerous under dead wood, ad.
+ juvs. (considering dead juvs. this) apparently
distinct Ischnopt. 1 ♂, same situation.
Calolampira sp. 2 ♂, 5 ♀ + number of juvs.
under dead logs + bark. Scania sp. 3 ♀s
in bare spots in paths + on low vine-
like vegetation in recently cleared
land, in same situation as Allotettix,
very active. Allotettix sp. with ropes in
same situation. Long prothoracic
setigrid with Allotettix - same genus?
Microstyl. fus. Francis but 1 sm. ♂ on
forest under, in low vegetation. Hellicia
n.sp. with white spot on subg. pl. 1 ♂ +
four juvs. low vines + tangle in recently
cleared land on edge of forest, very
active, all seen taken. Hellicia with
uniform dorsal surface, 1 ♀ and 1 juv.
all seen, in same situation. Hellicia
with reddish lat. lines + reddish
dorsal suffusion, 2 juvs. in same

condition. Immature green pseudo-
phyllid beaten from tree foliage
along road. Phyllus-like species,
all immature, in dead wood & under
logs. Adult ♂ reddish phyllid
taken from under large dead log.
Phyllid, 1 ♂, 1 ♀, with polished
trachyporus termina in ♂ taken
in moss & low vegetation in very
recent clearing.

$$71 + 1612 = 1683$$

$$\text{Other ins } 71 + 1558 = 1629$$

1923. 67 Rio Macho, between
Guadalupe & La Palma, C.R.,
elev. ^{4400 feet} 4250 feet (uncert.) 18.2.1923.
(R. & J.)

All from romeliads in the
trees along road fences.

Metacoma reficeps 1 ♂, 2 ♀.

Stalioa unipinata 1 ♀.

Pentoptera picta 1 spec.

a number of juv. brattid.

Chorisoneura sp. 1 sp.

2 juv. pseudophyllid, prob.

Coccinellus rarus.

$$14 + 1683 = 1697$$

$$\text{Other ins } 4 + 1629 = 1633$$

1945.08. 1st Carpenter, south of
1st Ave, C. R. Elev. ⁵¹⁰⁰ ~~5000~~ feet, etc.
to ~~5000~~ ⁵¹⁰⁰ feet ascending, 1X. 4. 19 in.
(Luminescence + Rain).

no grass pastures on hillsides,
trips of second ranch trees,
with bamboo and patches of growing
ranches with trees,
at ~~some~~ ^{some} ~~places~~ ^{places}, etc. etc.
nt. Much ~~some~~ ^{some} ~~work~~ ^{work} done.
Mitresura from ~~some~~ ^{some} ~~places~~ ^{places}, juv.
Anaplecta decipiens from ~~some~~ ^{some} ~~places~~ ^{places}, juv.
Reclat. Zapoteca type 3 from
~~some~~ ^{some} ~~places~~ ^{places} - Sch. rufa delilis
from specimens from under dead
wood in open & in forest. Short-
winged flattened with pale lat. ~~some~~ ^{some} ~~places~~ ^{places}
3 spec., from under dead wood in
heavy forest. Large Stach Corycotis
ads. few & juv. numerous under
stones and dead wood in forest,
also in ~~some~~ ^{some} ~~places~~ ^{places} - ~~some~~ ^{some} ~~places~~ ^{places}
odor. Spiny Anis anophine sp.
1 ♂, from ~~some~~ ^{some} ~~places~~ ^{places}. Very robust
biting id one in dead leaves of
heavy forest floor. Episacrus
truncatus 1 ♂ in ~~some~~ ^{some} ~~places~~ ^{places} forest.

Schist. Zapoteca 1♂ from along
under of forest. Schistocerca

2 ♀ in low growth in heavy
forest. Microgaster juv. from

3♂, 2♀ from heavy forest, under-
growth and glades. Orophus

stylota H31
numerous everywhere. Micro-
scutellum 1♂ scutellum from edge
of forest. insana

sp. 2 specimens

one near forest

one near + under

undergrowth. ant.

winged Pseudophyllis

numerous, both sexes, on branches

many juv. Gryllus

sp. 1 juv. from

branches.

Gryllus assimilis

1 ad. from under

road log. Sting Gryllus 2♂, 1♀,

from under log. - some in

nest. Pale Gryllid with

long legs, 1♂, ~~under~~ from

branches. Robust Gryllid

with short legs. 1♂, from

branches.

Chortophaga

juv. only in

both color phases,

in grassy

fields.

Microgaster

ads. few. many

juv. in fields

89 + 1697 = 1786
Others. 49 + 1633 = 1682

1923. 69 Pacaya, CR. Elev. (am.)
6250 feet. IX. 5, 1923. (Kanku
- R.)

in grassy fields, fence rows, scattered
trees with ferns & bromeliads,
dead logs.

Mitrasoura both sexes in bromeliads,
all seen taken. *Latia* like
type, 1 spec., in bromeliads.
Pras species, 1 ♂ in bromeliads.

Rhyacholates 1 ♀, all seen,
in bromeliads. *Ich. rufa*
dehler 1 ♀, under dead logs. *Shing*,
trachypterus *hispelthis* like
beast 1 ♂, 2 ♀, just in dead wood.

Ceryx *volleyi* in air
numbers in dead logs & under
same. *Mell. Zapoteca* type
in ♂ from bromeliads.

Choroph. merid. in ocaos in grassy
fields. *Ichist. Zapoteca* type,
3 ♂, 1 ♀, in weedy & grassy
fields. Green phasmid-beaten
from ferns on fallen trees.

Scop. mus ad. ♂, at light
at night. 3 immat. powder

Dichroplus 1 ad + sev. juvs. in
grassy field, all adults seen.

Phyllids representing 2
species, from bromeliads.
Gryllus, seen under stones.

53 . 1786 = 189

Altitude 47 + 1682 = 1,29

1923.70 Pacayas, C.R. 6000-
6250. IX-6, 1923. (Lankester
- R.)

Roadside, grass fields, corn
fields, forest fringe and depth of
forest of heavy trees; dense
undergrowth, ^{some} heliconias, many
northern types of trees, etc.

Molobophora ruficeps both sexes,
numerous in bromeliads and in
under dead wood, logs, etc.

Quirognathus in bromeliad &
under dead wood. *Procladia* ♂ &
fem. ditto. *Moly.* of the *Zupotera*
type, one from bromeliads. Large
Pitopeltis like species in
the stump, edge of ^{*P. dicameral*} ~~wood~~ sand.

Small Litopeltis like species,
♂ ♀, from under bark & in dead
wood. Lissotriton, one from
streambeds. Campylodactylus like
sp. 1 under bark of tree. Amygdalium
viridifolium, all under dead wood
& bark on stumps & logs. Hyla
sp. 1 ad. ♂ 1 juv. ♀, swept from
foliage in forest. Scaphiophryne, robust
species; from ground foliage in
forest, mainly juvs. Cherophaga
meridionalis in grassy
fields & roadside, not common.
Schistocerca gambica ♂♂ only,
not common in grassy fields.
Microtylopteryx fusiformis 1 juv. ♂,
along forest edge in undergrowth.
Orophus sp. in tangles of vines
along forest border. Black
Stenopelmatus 1 ad. & 3 juvs.
under bark of dead trees & stumps
at edge of forest. Small Cocco-
phus, male short legs, ♀ long
legs. number of juvs. from under
bark of trees and out of

Paragryllus tenuiter
 dead guano leaves.
Gryllus sp. ads. under dead
 logs. *Rehniella glaphyrea*
~~*Capri*~~ *supracinctus*
pinis, from under bark, eight
 feet up in tree. *quadrifidus*
vestitus species, ad. *Trachy*
Eugryllus *viraginalis* *ad.*
 under bark of dead tree.
Other *pinis*. *supracinctus*
 in similar situations. Pale
D. ochraceus species under
 under dead log. *Microgryllodes panamae*

$$92 + 1839 = 1931$$

$$\text{other nos } 75 + 1729 = 1804$$

1923.71 Between Pacayas &
 Colitlanco, S. E. slope of Irazú,
 C.R. Elevation 6700 feet. IX. 7. 1923.
 (Lambert - R.) Beating rubber
 along run in strip of forest. 1 juv.
Mimotia ^{swamp} from foliage. 1 *Para-*
tettix swept from bare ground &
 grass. 2 + 1931 = 1933.
 other nos. 4 + 1804 = 1808

1923.72. Abon Coliblanco, S. E.

Slopes of Dragón, C.R. Elev. 8300 feet.

IX.7. 1923. (Lankester - R.)

In dead wood - under logs. 1♂, 2♀
+ number of juvs. of Praso(?) or
Rhyacolabis.

$$6 + 1933 = 1939$$

$$\text{Uther in } 1 + 1808 = 1809$$

1923.73 N.E. slopes of Dragón, C.R.

Elev. 4000-9150 feet. IX.1. 1923.

(Lankester - R.) ^{Head of Toros Amarillos} in heavy forest, with
many Gumera, along old trail, with
very steep slopes - sheer cliffs below,

rock broken, lava, pumice and reddish
ash. alt. Dist. abn. Taken by

shaking dead leaves of Gumera. Num-
erous ♂♂ & ♀♀ + some juvs. of Praso(?) or
Rhyacolabis. Large series of both sexes
of Tristanella maculata.

$$42 + 1939 = 1981$$

$$\text{Uther in } 12 + 1809 = 1821$$

1923.74 Pacayas, C. R. Elev.

6250 feet. IX.6. 1923. (L. - R.)

At light. 1♀ Enicospila + 1 Micro-
trophina.

$$2 + 1981 = 1983$$

$$\text{Uther in } 8 + 1821 = 1829$$



* collecting station



Turkey

Progu
dunm
Chicoa
(San Juan
de C.)

Tierra Blanca

E. Pauton

Coriblauso

• Pacayas

1923.75 Beloso Pacayas, around
Barrantes, C. R. Elev. 4800-5900
feet. IX. 8. 1923. Lankester -
Rehm.

In grassy fields and in one
piece of dry hillside forest, with
but little dead wood - no bromeliads.
Small Litopeltis sp. 1♂, 2♀ under
dead wood. 1♂ Ischnura delilis
ditto. Bitincate Anaplecta swept
from foliage. Chorisoneura 1♀ with
ovotheca swept from foliage. Epi-
lampira sp. 2♀ from dead wood
(Lankester). Eurycotis holleyi found
dead. Paratettix swept from bare
spots in woods. Silvitettix, ♂♂, ♀♀, juvs.
from woods, hopping in dry open
spots, where sunlight filtered in, very
Orphulella in fair numbers in grassy
fields. Rhachicrespa 1♂, 1♀ + juvs.
in foliage in woods; active. Insana
spicosa 1♀ hopping in dry
part of woods. Oreophus (particularly
♂♂ well distributed) (males,
in woodland brush. Minetia
juv. beaten from undergrowth

in woods. Small Amphicrustus
sp. 1 ♂, from under dead woods
Polished pyllia, 1 ♂, 2 ♀♀,
hopping on ground seen in forest.
~~Blachroptera~~ Aidemna 1 juv. in
woods low growth.

$$40 + 1983 = 2023$$

$$\text{Ulther ins. } 17 + 1829 = 1846$$

1923.76 Uesta Farm, Estrella
Valley, C.R. Elev. about 200 feet.

IX. 11. 1923. (R.) In dense forest,
with more palm than that at La
Cucilia, but less impressive trees
and in general not as productive.

Paratta series all under bark of a
dead tree, with Capucina. Uenis labis

sp. 1 ♀, same location. Agadomops
sp. swept from foliage. Pseudophyllodermis

Procuttella sp. 1 spec. Uenis labis 1 sp.
ditto.

in dead leaves on ground.

Anapluta of decipiens type, in dead
leaves - from foliage. Panchlora 1

juv. under dead wood. Epilampra

4 species, shaken from dead, narrow
leaves. Capucina patula 1 ad +

imm. juvs. from under bark of

dead tree with paratita. ♀ Mimox
running on dead leaves on ground.

M. stigmantis (?), taken
from foliage. Juv. Ceroys (?), taken
from vegetation. Settip. with
richer coloration and white
undulate median carina, 3 juv.
taken walking on richer bark of
dead tree. Other three pieces of Settip.
except from ground among undergrowth
in open trails. Eumastax 1 ad.

except from vegetation, juv. numerous
in same situations. Juv. Dacnophora
except from foliage. Juv. Musia
ditto. Dacnopus centurio along
farm road through bananas just
before entering forest. Crochus large
species, occasional in forest. Juv.
of three species of Phaenopternia,
all taken from foliage. Juv. Eriolus
from foliage. Juv. Physometopus
hopping on ground under corn.

Neocoryphalus sp. resting on low
plant in forest. Pair of Coccyzus
shaken from dead guano leaves.

~~Agave~~ Scopimus - like species

ditto. ~~Encyrtus~~ ^{Ponca venosa} Encyrtus numerous in
forest, mainly juv. Large
mouth, dark brown, yellow from
under bark of dead tree. Amphicnistus
specimen from under hollow log. ^{phalaris}

Small Amphicnistus sp. with
greatly reduced legs. in dead
logs. Three species of Cyrtosiphia, black,
brown & green, all on foliage in forest.
Remarkable Symphylephid, with
honey-dew shaped punctal marking,
1♀, swept from forest fringe.

$$100 + 2023 = 2123$$

$$\text{Other no. } 21 + 1846 = 1867$$

1923.77. Aurora Farm, Estrada
Valley, C.R. Elev. ab. 100 feet.

IX.11.1923. (C.R.). in potrero of
cleared forest, some large logs
about, but none yielded any ants.
Filiigids swept from along path
in heavy grass. juv. Encyrtus
unicornis in grass. Common
microphalus numerous in
grass, both sexes taken.

very scarce. *Emmeryph.*, ♂ with shorter,
 broader series, very scarce, search
 brought only the single ♂ to light.
Symphylorhynchus magn. common in
 tall grass. *Maxipha* like sp.
 ditto. Small *Cyrtorhynchus* not
 common in grass, two ♂♂ taken
 all same. = *Symphylorhynchus nequellus*

$$49 + 2123 = 2172$$

$$\text{ethinus. } 11 + 1867 = 1878$$

Also 1 *Trich. rufa* in house at
 night.

1923.78 Saturna Farm, Estralla
 Valley, C.R. Elev. ab. ¹⁰⁰100 feet.

IX. 12. 1923. (R.) Along border of
 wet forest and in bananas. *Balis*
americana 2 ad. + juv. in trash under
 head of dead palm on edge of forest. 1 *Pyrausta*
fusca ditto. *Labis* sp. in leaf
 bases of same palm and in dead stuff
 on ground under leaf bases. 1 *Com-*
psodes in trash on ground under
 same. *Pseudophylodromia* on
 forest foliage. *Neot. wahua*
 in fair numbers in dead banana

leaves. Neot. ? pratensis common
in the same, & imm. juvs. Range
heavily moulded Epilampra
from ^{dead} ~~dead~~ ~~banana~~ tree. Capusma
1 ad. + juvs. ditto. Panchlora sp. juvs.
in ground debris in banana-groves.
Ritopeltis ? sp. 1 ♀ taken from
dead banana leaves. Very small
juv. mantled except from vegetation
near banana trees. juv. prispoid
phasmod taken from dead banana
leaves. Cumastor from foliage
on forest margin. Stuxalis brex.
1 ♀ in tall grass under bananas.
Arphulilla sp. ditto. Somilia
occ. in banana stands. Micro-
xylopteryx resifensis / apparently
local in forest margin, in tangled
vegetation. Rhachicregia rare,
ditto, all seen 1 ♂ taken. Tacnis-
orda centurio 1 ♂, all seen, in banana
land, in weedy growth. Microcephalus
sp. 1 ♂, 1 ♀, in weedy growth under
bananas. Erophus, ditto. Both
species of Mercur. very local &
uncommon in ditto. Three species
small pyllids all taken from

foliage of forest under.

$$88 + 2172 = 2260$$

• Other in $52 + 1878 = 1930$

1923.79 same as 1923.76 but
IX.13.1923. Same forest conditions.

Caprimia juv. under bark. Pseudo-
phyllostomus on foliage. Not.
sp. shared from ^{dead} Guarano leaves.
Spurius x-like mauriti 1 ♀ + 1 juv.
running on ground. Juv. Bolbid
mauriti, ditto. Pseudophasma
mauriti flying in forest. mauriti.
• protopod phasma mauriti from
foliage. Stegid with irregular
median carina on bark of moss,
tree trunk. Stegid with high
median carina on one spots, such
as along leaf. Cumacast sp, ad.
very scarce, juv. numerous, on
foliage & in undergrowth. Abila
1 ♂ 1 ♀ in undergrowth. Micro-
xylopteryx pro mauriti numerous
in undergrowth & ^{only} in higher
foliage. juv. mauriti script
from foliage. juv. mauriti
from mauriti mauriti outside

of forest. Crochus abundant
 in undergrowth, common, frequent.
Diadema sp. 1 ♂ swept from foliage.
Sphyrapeterson 1 ad. + juv. hopping
 on ground, adult in dead leaves &
 twigs. Phlegis 1 ♀ swept from
 foliage. 1 ♂ 1 ♀ Copiphora cultus
 swept from foliage together, ♀ only
 in in coitu. 1 ♀ Cremus sp. swept
 from foliage. 1 juv., 1 imm. ♀ ♀
Normophanes ditto. 2 juv.
Mimeticia swept from foliage.
~~Encoptera = Pericoma reclusa~~
~~on ground & in low growth, but adult~~
~~scarce. 2 ♂ of remarkable Encoptera~~
~~species swept from low growth.~~
Green Cystixipha swept from
 foliage - low growth. Brown
Cystixipha + the species, 2 ♂, with
 red-lined legs swept from same.
Symphylex species 1 ad ♀ & 1
 juv. from low growth.

$$96 + 2260 = 2356$$

$$\text{Others} \quad 16 + 1930 = 1946$$

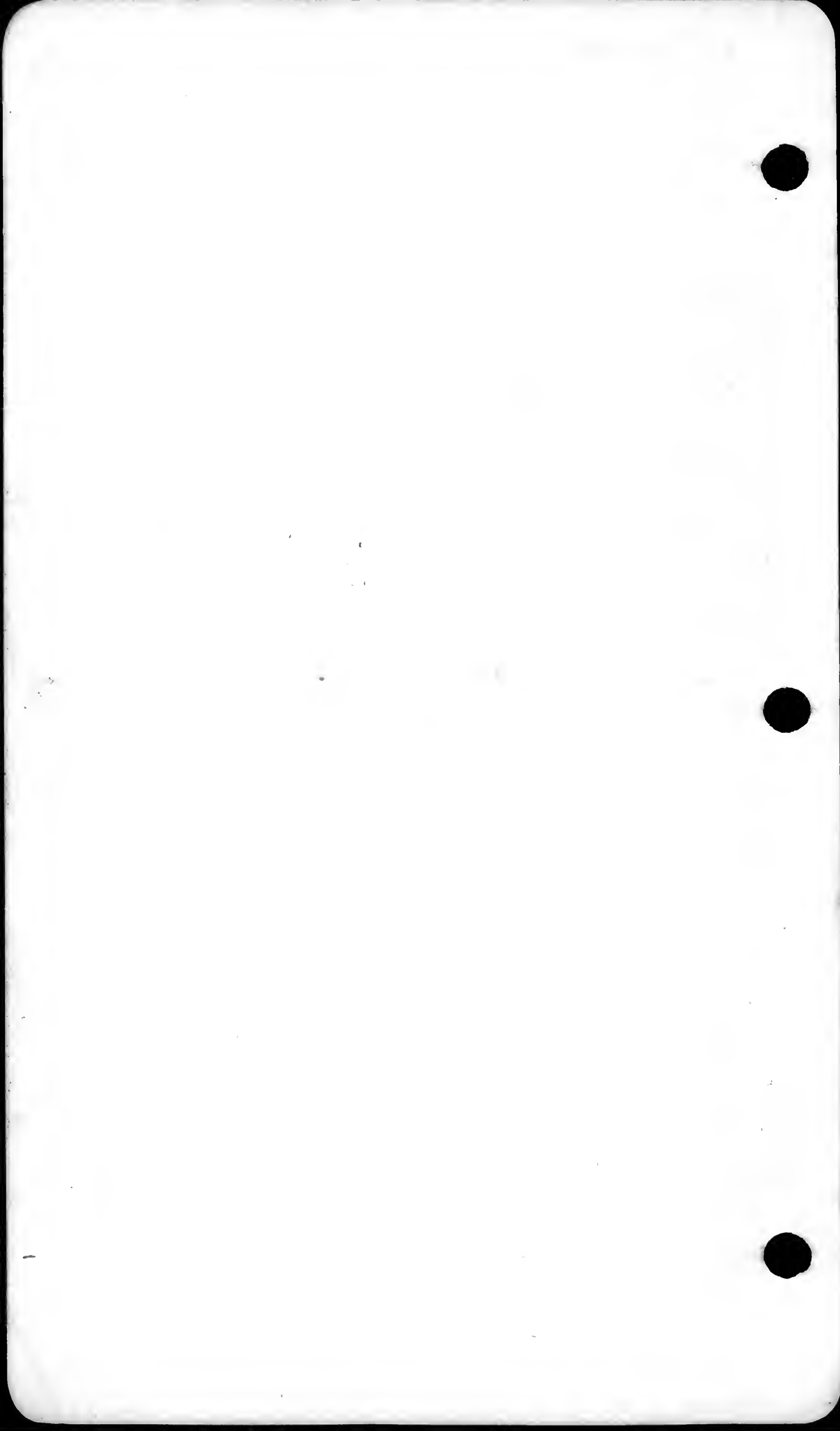
1923.80 Pandora Farm, Costilla
valley, C.R. Elev. ab 500 feet.

IX.13.1923. (R.) In dense forest,
more swampy than at Uesta Farm.

Gongrocnemis from rolled leaf.
Juv. Panclora from under dead
wood. 1 Microt. fus. formis from
low growth. Anaulacnemis sp. 1♂
resting on leaf of young palm.
Short-winged flycatcher 1♀ under
dead wood. Amphispastor 1 juv. ♀
from hollow in dead wood.

$$11 + 2356 = 2367$$

$$\text{Other vis. } 14 + 1946 = 1960$$





Juapiles C. R. Tally
 Aug. 12-12. - 44 species.

" 14	3	"	add it
" 15	17	"	"
" 16	5	"	"
" 17	1	"	"
" 18	9	"	"
" 19	4	"	"
" 20	11	"	"
" 21	5	"	"
" 22	5	"	"
" 27	10	"	"

Cerrn. of,
 not counted 112

Vicinity of San José & La Palma	32	172
---------------------------------------	----	-----

La Capintera	11	Estrella Valley 19
155	191	

Pucayas 2 days	12	Total
167	sp. CRC- 191	
Drage slopes	3	
170		
Last day Pucaya	2	
172		

Costa Rica

1927

1927. 1. Las Conchas, Costa Rica.
Elevation ^{approx.} 4550 feet. VII. 22, 1927. (R. + L.)
All taken from orchids or
building supports in green house
at night with aid of flash lamps.
Meteorus. A number seen, mostly
immature, adult pair taken. Ichneumon
numerous, six taken. Neoblattella
species. One male on orchid. Cory-
cotis billeyi on building wall.
Pseudomiopteryx infusca One ♂
resting on orchid. Minutica sp.
juv. similar in situation. Immature
pseudophyllids. Numerous on
orchids which they eat. Several
taken.

17.

1927. 2. Same as 1927. 1 but in
wedy field along edge of coffee.
VIII. 23, 1927. (R. + L.)

Crophus 1 ad. many juv. seen. Moara
1 ♀ in weeds. ~~At~~ Heichropus
quite a few, 2 taken. Oxyphelilla
1 ♂ taken, all seen. Schistocerca
2 ad. seen & taken, numerous
juv. several taken. Episactes
brunnei 2 ♀♀ seen, 1 taken.

in full woods. Cremaphysalis
several in same. Metresura
from bromeliads on ^{coffee} trees.
Stalioa; same.

$$15 + 17 = 32$$

1927. 3. Las Conchas, Costa
Rica. VII. 23. 1927. From bromeliads
on myrtle & other trees. L+R.

Plectroptera 1 juv. bromeliads.
Mollatella sp. A number in
bromeliads, both sexes taken.

Ischnoptera large sp. One taken,
2 juv. bromeliads. Ischnoptera short winged
1 ♂, 1 ♀. bromeliads. Chiatypa
(?) sp. 1 ad. ♀ bromeliads.

Emycolis trilogy; 1 under bark.

Metresura num. in bromeliads.

Arphutella 1 ♀ in grass
 $32 + 20 = 52$

Other insects 10

1927. 4 Same as 1927. 1 but
at light at night in house.

1 Pseudoniopleris ♂. Pseudoniopleris
moths. L+R. VII. 23. 1927

$$52 + 1 = 53$$

Other ins. $10 + 6 = 16$

1927. 5. Same as 1927. & the VII. 24. 1927.

Meliponine bees from flowers in garden.

L + R.

Orth. 53

Other ins. $16 + 14 = 30$

1927. 6. Navarro, Costa Rica.

VII. 24. 1927. Elev. (aneroid) 3800 - 3950 feet.

L + R.

Work done on edge of heavy forest in low undergrowth of various herbaceous plants, many spiny, also under bark, under dead logs & branches and moss on same. A few things from cleared land adjoining forest.

Metacampa, 1 ♂ under bark of dead log. Anaplecta of mexicana type. 4 under moss on tree roots & in dead leaves on ground.

A. analis type 2 ditto in dead leaves on ground.

Centlastoblatta (?) 2 ditto.

Pseudomops 1 on leaves. Pschroptera short-winged. 1 under bark of root.

Epilampra (oral sp.). Under bark on large tree. 1 ad, 1 juv.

Ritopellis 1 ♂, 2 ♀, 2 juv. Under bark of tree in forest. Strange striated legs.

Capricornia 1 ad. Same as Epilampra.

Pseudomicropteryx x 1 ♂ in forest.

Tettigidea sp. Pair in coiter in forest.

Plectromorpha^(?) sp 2 ♀♀. In forest
on leaf covered ground.

Eumastax dentatus 1 ♀ on
broad leaved plant in forest.

Orphulella One in open grass
area on edge of forest.

Truxalis brevicornis 1 ♂ 1 ♀ In ditto.

Ichneumon Along edge of forest 3 taken.

Rhachicnaga In fair numbers in
forest, mainly immature. On
ground and on low foliage. Active.

Silvettix ditto. Numerous.

Microgaster ~~tristatus~~ tristatus
As in Rhachicnaga.

Dacnusa areolaris. In similar
situations, but less common.
Mainly immature.

~~Helorus~~ Hyasacris n.sp. (?) Scarce
on foliage of broad leaved
plants. All seen taken. Hirsutum
of abdomen of ♀ with distinct
metallic sheen.

Insara. Both green & brown phases,
chiefly immature. Not common.
Adults & juvs.

Crophus trassellatus 1 brown
individual on low forest foliage.

Cerophus small green sp. Both green & brown phases. Common in forest in low foliage.

Sphyrmetopus, 1♀ ad. hopping on ground among dead leaves.

Stenopelmatus 1 sm. juv. (black) under bark of rest.

Mutchea 1♂ + 1♀ in coitu. Hopped from under side of bush with spiny stems & spiny large leaves. (Urera sp. acc. to Lankester).

Large Amphiacustine gryllid. Four adults - 1♂, 3♀, from under bark of large lone tree off from forest edge.

Gryllus assimilis 1 juv. in forest floor.

Small amphiacustine gryllid with greatly reduced lat. tegmina.

1♀ in forest floor.

Cyrtoxipha sp. One on low forest foliage.

Moth has most remarkable procrustian pose when at rest.

$$53 + 107 = 160$$

$$\text{Other ins. } 30 + 70 = 100$$

1927.7 Ipis, Costa Rica. VII. 28. 1927.

Elev. about 100 m. below Rio
Machio (see old notes) (T. & R.)

Under dead wood alongside of
road. 2 *Emycolis biolleyi*.

$$160 + 2 = 162$$

$$\text{Other } 100 + 2 = 102$$

1927.8 La Palmar. VII. 28. 1927.

Elev. already known. (T. & R.)

Along trail in partly cut out under
forest. Beating, sweeping, under
dead wood, etc.

Anaplecta lateralis type. Two in
dead leaves & bark.

Melospiza 1 ad. segm. ♀.

Under dead wood.

Ep. lampyrus 1 juv. ditto.

Microlypterus rustain 1 on
foliage.

Ptilotritix sev. juv. hopping on
ground.

Archotritix type. Numerous on
ground & low vegetation.

Callotritix sev. ditto.

Sphyrnotopus 1 ♀ hopping
in low growth on cleared ground.

1 ♂, 1 ♀. Nearly apterous gryllid.
adult in forest in rain soaked ground.

$$162 + 27 = 189$$

$$\text{Other } 102 + 33 = 135$$

1927.9 As 1927.8 but at light at night. Night foggy.

1. Ichneumon infa occ.

$$189 + 1 = 190$$

With Others 135 + 220 = 355
bites.

1927.10 As 1927.8 but VII.29.1927.

Taken along road in soaked vegetation and along stream course extending into patch of forest.

1 juv. Ichneumon infa. Under dead wood.

1 Ichneumon f infa type. ditto.

1 juv. Latitattella ~~ditto~~ in moss on stump.

1 sm. black Ceryiid such as was taken at Navarro. Under bark on dead log.

1 ad. ♂ Neurobius like spec. on ground among soaked vegetation.

Scania sp. 2 juv. On low foliage.

Acrotettix among ground growth.

Ulotettix On low foliage.

Microleptus fristans 2 ♂ on foliage.

$$190 + 21 = 211$$

Others

Also 1927.10 afternoon

Microgaster x tristis various

stages of immaturity in grasses
& low plants on recently cleared
land at forest edge. Allotettix &

Obetettix, ^{among} ditto. Scania adults on
leaves, etc. in same situation.

Remotus-like gylleni. Both sexes adult
in same area. Peromyscus (?)

juv. in same situation

$$211 + 21 = 232$$

leaves 355

1927.11 La Palma, Costa Rica.

VII. 29. 1927. (T. & R.) At light &

1 Ich. rufa occid. in house. ^{night}

Far fewer moths than on previous

night. Night raising.

$$232 + 1 = 233$$

$$\text{leaves } 355 + 56 = 411$$

1927.12. Same as 1927.8 but

VII. 30. 1927.

In cleared land, scattered bush
clumps, cut banks, etc. along road.

Mitocura sp. 1 juv. ♀ from small
branched growing on cut bank.

Obetettix sp. ♂ & ♀ in drier moss
on dead wood.

Black coryiid in dead wood & leaves
under logs.

Epilampra sp. juv. under dead logs.

Altotettix & Achetotettix same sets.

collected yesterday.

Ripipteryx sp. swept from tree
trif at foot of cut bank.

Immature large amphicercine
type. Under log.

$$233 + 24 = 257$$

$$\text{Others } 411 + 16 = 427$$

Also 1927. 12 afternoon.

1 immat. Labis in moss on dead log. Everything soaked.

1 ad. ♂ short-winged Ichneumonid.

From moss on tree trunk. 1 immat.

Perisphaerid ditto. Black coryiid,

one in moss on log on ground, the
other in kitchen of finca on wall.

1 ♂ 1 ♀ Anaplecta of lat. type in moss
on logs. Achetotettix in low ground

growth. Scaria on ground vegetation.

Nemobius-like pyllus, as Achetotettix,
very active and elusive. Sphyrnometopus

1 juv. ♂ in low ground com.

$$257 + 17 = 274$$

$$\text{Others } 427 + 19 = 446$$

1927.13. Same as 1927.11 but VII.30.1927

Great^{er} clouds of moths at light -
all Coleoptera seen taken.

Large Scarab. sounded like aeroplane
coming through air. Night foggy.

Cnth. 274

Other ins. $446 + 332 = 778$

1927.14 Ascezi, Costa Rica
VIII.2.1927. (R.). Elev. (by
aneroid) 4800 feet at walking
point. Along road through coffee
plantations, collecting in grass patches,
in stumps, slopes of cut banks and
unchanging vegetation - beating
trees. Every species of Cnth. seen was
taken.

Meteorus ruficeps Beuten from vine
foliage - from bushes. ♂ & ♀.

Ratiblattella parida. 1♀ Beaten from
foliage.

Schmaptera rufa group. 1 juv. under
dead wood.

Heteronemia sp. 38 ~~50~~ Beaten
from foliage. ~~23~~

Brodia (?) sp. 28 / brown / green.

~~20~~ ~~10~~ Same habitat.

Ochrotettix sp. Smpt from ground. ad.
& juv.

Tettigidea sp. ditto (nearly ad.)

Eumastoid sp.? 1 ad. ♂ swept
from low foliage - minus
hind legs when captured.

Urophlella sp. Abundant in
grass as juv. all ads. seen taken
from + from pharos.

Chiropterus (?) juv. numerous in
grass + low foliage.

Stilpnochlora quadrata. 1 juv. ♂
swept from low branches of large
leaved tree.

Anaulacromma digitata 3 ♂ 1 juv.

Beaten from low growth + bushes +

vines. juv. 1 swept from bushes.

Pseudophyllid - prob. Coccyzus
a fungivorus - ~~see~~ all juv. seen
in low bushes (beating) but one

considerable colony under loose
bark on stump along vine fence.
Buff + blackish. Black on face
somewhat variable in depth.

Mimotria sp. 2 sm. juvs. swept
from vines - bushes.

Ripipteryx with yellow edged
pron. juv swept from grass +
low ground.

Cetotrypa like bract. Three juvs.
beaten from low foliage.

Spring
hemiptera
clustered
on low plant
all juvs.

$$274 + 60 = 334$$

$$\text{Others } 778 + 140 = 918$$

1927. 15 El Alto de Achomogo,
Costa Rica. VIII. 3. 1927. (R.)
Elev. 5150 feet (Pittier)

Collecting done in grass area,
used grown trail with hanging
vines and extensive work on
brachiado, *Laegedidium* + small,
dry - wet types, in isolated
trees in rolling potrero.

Metasura numerous in brachiads,
ads. - juvs.

Pravo sp. ditto but all adults.
Very local. From one brachiad.

Chorisneura sp. ditto. All seen
taken adults only

Plectoptera picta. ditto. adults
only. All seen taken.

Euryctis biolleyi. In brachiads,
few adults, but all stages imm.

Ratiblattella parida. Scarce in
brachiads. Three, all seen, taken.

Insara juv. in tall weeds &
grasses.
Chrysophalus juv. Few in tall
weeds & grasses.

$$334 + 75 = 409$$

$$\text{Ather 918} + 83 = 1001$$

1927.16 Rio Maria Aguilar,
near San José, Costa Rica.

VIII.5. 1927. (R.) Elev. 3750 feet
(aneroid).

Work done along coffee fences, in
vine and bush tangles at river
bank and in fields, also bank
work and examining roadside
trash.

Meteorus 1 ♀ beaten from vines. Ochus-
bettix 1 juv. in road (grassy). Truxalis
brunneicornis 1 ♂ in bush tangle. Aphidius
all juv. numerous in field & along
road. Schistocerca 1 very juv. in
bush tangle. Aideuma juv. in a
number of instars - along road &
in tangles. Ampelophila with (prob. apicatus)
orange apex to abd. in adult, 1
ad. ♀, a number of juv. in
various stages. In vine and
bush tangles only, very local.
Long search revealed but 1 ad.

Urophus wateri 1 ♀ ^{in grass.} ~~beaten from~~
viadana sp. 1 juv. Beaten from
vine tangle. Insara sp. juv. ditto.
Conocephalus sp. 1 juv. in grass.
Coccinella juv. Beaten from trees.
Orange pyralid immature. Ditto.
Ripipteryx orange bordered, along
road.

Casoids all beaten from vines,
bushes & trees.

$$409 + 31 = 440$$

$$\text{Others } 1001 + 65 = 1066$$

1927.17 Acseri, Costa Rica

Elev. [on basis of church elev. ex
Pittier] 4400 feet. VIII. 5, 1927. (R.)

Collecting done along coffee fences,
in epiphytic vegetation (no bromeliads)
on poró and quitile trees in fences,
bark of same, roadside grass,
vine & brush tangles on cut
banks.

Metusma beaten from trees. 2 juv.
Chorisoneura 2 beaten from vine
tangles on cut bank.

Sermyle 1 ♀ + a number of
juvs. beaten from hanging
vine tangles on cut bank.

Paratettix sp. juvs. in bare areas
of road.

Urophylloa few adults in roadside
grass. Aidemina 1 juv. in

ditto. Ampeliphila sp. 4 juvs.
from vine tangle on cut bank +
in grass at foot of same.

Rhicnoderma sp. 1 juv. Beaten
from vine tangle on cut bank.

Isara juvs. ditto.

Urophus ovatus sev. in grass.

Coccinellus sp. juvs. in many
stages - common on poró and
pititi trunks, in agar hedges,
beaten from trees & vines. Selection
only retained.

Mimeticus sp. Adult ♂ taken
from crevice in poró trunk
with many epiphytic plants.

$$\text{Orth. } 440 + 47 = 487$$

$$\text{Other ins. } 1066 + 16 = 1082$$

1927. 18 San Isidro de Coronado,
N. E. of San José, Costa Rica. VII. 6. 1927.
Elev. 4300 - 4400 feet. (R.)

Collecting done along roadsides through
coffee plantations and pastures,
cut bank vegetation, drain roads,
orchids and mounds in guile-
and poró fence trees and a little
loose bark. No branchiads seen.

Metacoma numerous in mounds &
earth particles among roots of
orchids. Skalistes ditto.

Euryctis holleyi: But a single adult,
altho' numerous juvs. Mainly under
bark, but also in root tangles of orchids.

Stagmomantis sp. 1 juv. from
vine tangle hanging on cut bank.

Crochus cratus 1 ad. & sev. juvs. in
grass & cut bank.

Mimica sp. 1 juv. male in among
small orchids in poró.

Gongrocampa sp. 1 ♂ 1 ♀ & juvs.
(ads)

Among orchids, 2 under loose
bark. Isara sp. 1 juv. from
moss on cut bank.

$$487 + 51 = 538$$

$$\text{Others } 1082 + 54 = 1136$$

1927. 19 Same as 1927. 15 but
VIII. 7. 1927.

Collecting done in rain and
drizzling. Examining bromeliads
on various trees, beating trees,
bushes, vine tangles, etc. No sun,
little stirring.

Mitrecara + Thalictus in bromeliads on
poor stubs, etc. along roadside. Sometimes
the two were together, again individually
localized. Sometimes in small
colonies, again single ind. Chorismeria
both beaten from trees - from bromeliads.

$$538 + 44 = 582$$

$$\text{Cater} 1136 + 8 = 1144$$

1927. 20 Rejivalle, Costa Rica.
VIII. 9. 1927. Elev. (amer.) 1850
feet. (R.)

Let house at night only.
1 Psalis americana, 1 Peripl?
anstr. 1 Anaplecta unalisignata,
3 Thore lineare, 1 Notomysia
nitida, 1 Cyrtosipha, light br.
with dark humeral line. ♀.
1 Nesocor. triops.

Cater has 2 luminous spots
on prothorax

$$582 + 9 = 591$$

$$\text{Cater} 1144 + 13 = 1157$$

1927 21. Pajivalle, Costa Rica.
VII. 10. 1927. R. Elev. 1850 -
2100 feet.

In banana fields, in old wood
from areas and in heavy forest on
hilly slopes.

Parasparattus sp 1 ♂ in large forest
brumeliad. Geracid Wern. 1 ♀
nearly ad. from smaller brumeliad
in forest. Anaplecta analisignata
1 swept in forest. Neoblattella sp.
♂ and ♀ from dead and hanging
banana leaves. Epist. abdomen-nigrum
1 in same habitat. Immat. Blatt.
with brown median line, ditto.
Uchettettix sp. 1 in forest floor.
Uremilia infrag. ad + juv. in bananas.
Microstylpteryx fr. formis type 1 juv.
♀ in forest low vegetation. Rhachicreagra
var. ad + juv. ditto. Leptomerinthopora
1 ♀. ditto. Crophus numerous
in forest, low vegetation. Neoron.
ad + juv. with color phases, ditto
Panor. - like py. Urid. 1 juv. ditto
same habitat.
Cyrtoxipha - all brown species. One - same

habitat.

$$591 + 29 = 620$$

$$(ethus 1157) + 22 = 1179$$

Same P.M.

Collecting in fields, a few bromeliads
in trees in potreros, grass, weeds along
roads, shrubbery.

1 juv. Mitroscoria in bromeliad.

Maipha dark sp. v. lateralis type.

One from dead banana leaves. Ac-

blattella sp. 3 ♀: Same as above.

Neblattella dark lined ♀. Same as

above. Panochla sp. 1 ♀ Same as

above. Deblattella tubicola 1 sp.

Impt from bushes & vines.

Uchistotellus sp. from wet spot in
potrero. Leptocilla 1 ♀ from grass
along road. Acumilia juv. in

grass and weeds among bananas.
Microplus juv. 1 in grass.

Acrophus common in bushes and
vines. Encyphalus 2 species

in ditto, also grasses. Symphyl-

xiphus sp. Numerous in grasses
on roadside. Anaxipha a straw
colored species and a dark

limb species in bushes along roadside.

$$620 + 46 = 666$$

$$\text{either } 1179 + 76 = 1255$$

1927. 22 Same as 1927. 21
but at night at light at house.

666

$$\text{either } 1255 + 9 = 1264$$

1927. 23 Same as 1927. 21 but

VIII. 10. Elev. same. (R.)

Collecting along edge of forest, in forest on hill slopes, in bromeliads (few), in ^{dead} heliconia leaves and similar situations, also grass land.

Pezomachus 1 juv. from ground trash in forest. Neoblattella sp. (as yesterday) a number from ^{dead} heliconia leaves in forest. Large immat. flatid with dark median stripe, same habitat. Small ♀ immat. Bombus-like mantis ~~beating~~ forest low growth. Macrops - mantis 1 ♂ in morning on wet at house. Calynda 1 large ♂ walking on bare ^{horizontal} ~~root~~ of large tree in open cleared land - standing high on its legs. Paratettix several on forest floor. Cumastax 1 ♀ beaten from

forest undergrowth. Usmilia 1 ♂
 on edge of forest. Rhachicnaga
 on forest foliage, ^{ads. & juv.} pair of large
 green Pseudophylli (prob. Pliastes
 or Pristes) beaten from ^{dead} Heliconia
 leaf. White-faced gryllid 1 juv. beaten
 from dead Heliconia leaf. Ectostypa
 like sp. 1 ♂ ditto. At least 3 species
 of Anaxipha, one with exceptionally
 broad tegm. in male, all swept
 from low forest foliage or beaten
 from dead Heliconia leaves. Beautiful
 ♂ misoplistid, beaten from dead Heliconia
 leaves. Ripipteryx, yellow-
 bodied & orange legged species, one
 swept from low ground-cover in forest.
Anapl. malisignata 1 in Heliconia leaves.
 $666 + 42 = 708$

$$\text{Others } 1255 + 71 = 1326$$

Same: at night.

Epilampra colombiana 1 spec
 resting on screen mid of
 dining room. Epil. abdominalis
 on wall. Pamb. at table.

$$708 + 3 = 711$$

$$\text{Others } 1326 + 2 = 1328$$

1927.24 Same as 1927.22 but
VIII.12. Elev. minimum for
Pajonable. Through bananas,
in leaves of same, along train
way cut into forest and in
undergrowth in same forest.
1 juv. coming from banana leaves.
Neoblattella nahua 3 from same.
Neoblattella same sp. as taken before,
same situation. Neoblattella
♂ 1, like a small nahua, a number
of 1st sex from banana leaves.
All juv. Neoblattella from banana
leaves. Anaplecta aculeisignata
from forest undergrowth and
hanging dead leaves, etc. in
same. Panclima 1 ♀ from dead
banana leaves. Pseudophasma
menis 2 ♂ flying over grass and
weeds in banana's. Echistotletix
1 juv. from bare ground. Conidia
common in bananas and
more open portions of forest,
ad. & juv. Crotophaga largest
species, 1 ♀ in forest undergrowth.

Crotopus smaller species, very
common in banana groves &
in more open parts of forest.

Neconocephalus trisp (?)

1 ♂ in two woods in bananas.

Microstylpteryx fusiformis 1 ♂ 1 ♀
in bananas (1) & in open area in
forest (1). Leptomerinthoprora

1 in bananas. Metrioppa luteipyllic,
1 ♂, 1 ♀ in forest, ♀ under dense
conv. Smaller pycnid with others.

pale-edged tegmina, 1 ♂, 1 ♀, in

two forest conv. Anaxipha
for broad tegmina, 1 ♂ in forest
undergrowth. Anaxipha black
sp. with banded caud. fem. 1 ♂ on
forest floor in heavy shade. Anaxipha
pale mottled in banana areas
in two woods and forest edge.

$$711 + 66 = 777$$

$$\text{Others } 1328 + 25 = 1353$$

June P.M.

Along roadside & in banana
patches.


1 Litia curvicauda (?) from a banana
blossom. 1 Metrioppa ruficeps

Mottattella 1001, as before, from
 dead banana leaves. black lined
Mottattella 10 - ♀, same situation
Epil. abdimus-nigrum 1 ♂ 1 juv. from
 under a fallen banana bunch. Acro-
blatta luteola 1 ♀ shaken from dead
 banana leaves. 1 juv. Eutillid
mautis shaken from same. 1 ♂
Calypda beaten from mass of overhanging
 twigs and branches on cut bank.
Allotettix 1 spec. swept from grass
 among bananas. Ochetotettix sw.
 ditto. Urophidella 1 in roadside
 grass. Schistocerca malachitica
 type - seen in roadside vine and
 bush tangle. 2 spec. of Encephalus
 in grass and vines along roadside.
Symphyleptus numerous in ditto.
Cyrtixia, pale green species, beaten
 from ditto. Anaxia dark lined
 and pale mottled sp. ditto.

$$777 + 39 = 816$$

$$\text{Others } 1353 + 44 = 1397$$

1927. 25 Same as 1927. 22 but
VIII. 13. Elev. for unkh Pajivalle
maximum. In forest back of
house. Beating in openings, along
trail, sweeping low spots, shaking
vines, dead guaymas - heliconia
leaves, stripping bark & exam. dead
wood.

1 Pyrausta fuscata under bark on
cut log. Anaplecta mex. Type
small beaten from vines and dead
leaves. 1 Anapl. analis justa one
ditto. 1 " of lateralis type,
ditto. 1 " of large size, dark
color, species new for season, one
similarly beaten. Neoblattella
of 1920. ♂ subg. plate, 4 from hanging
vines, dead leaves & roots. Neoblattella
new to trip, with prev. dish collected
in dark & ♂ subg. pl  one
beaten from dead leaves. 1 juv.
Xestoblatta under log on ground, search
~~search~~ failed to reveal adults.

• Capucina patula 3 juv. under
bark of stump. Pseudophasma
minima 2 flitting through forest.

Annastacia 1 ♂ on foliage -
very green in life. Usmilia
a few ads & juvs. in forest, 1 juv.
taken. Rhachicreagra ^{in forest}
1 ♂ on forest foliage in sunlight hole.
Crochus - long species - 4 seen
- taken on forest low foliage - 2 in
lunar phase. Pygocorypha 1 juv.
♂ in instar preceding maturity,
~~leaving~~ ^{jumping} on forest ground cover.
Aphenomorphus 1 ♀ on low forest
ground cover. 1 ♂ light green
Cyrtixipha or Anaxipha, proximal
markings reddish, on large leaves of
undergrowth. 2 other species
of Anaxipha, same habitat.
Immature psyllids of several species,
all on ground cover in forest.

$$816 + 39 = 855$$

$$1399 + 33 = 1430$$

Same day - afternoon.

In banana grove, sifting in
dead leaves. Techneptera

Neothattella rubra 9 ♂ 9 ♀ from
dead banana leaves. Neothattella
smaller species, 2 ♂ from same.

Truxalis brevicornis juv. small instars
in grass along stream. Neomorphulus
sp. beaten from dead banana.

lunum. Cephus from grass along
stream. $855 + 25 = 880$

Ethrus $1430 + 3 = 1433$

1927: 26. Between Monte Redondo
Aug. 18. 1927.
& Sabanillas, Costa Rica. Elev. approx.

3000 feet. Sumping along trail at
a brief halt. (R. & L.)

1 Pseudophyllotromia on foliage. ^{from vines}

1 Cephus on weed. juv.

1 Dhamnoscutus (same one leg)
on leaves. Colpophan in weeds.

Aidemna in weeds.

$880 + 8 = 888$

Ethrus $1433 + 2 = 1435$

1927: 27 Betw. Sabanillas & Pozo
Azul, C. R. (Really betw. former
& largest stream crossed $\frac{1}{2}$ way). Elev.

approx. ³⁶⁰⁰⁻ 2000 feet. Aug. 18. 1927. (R. & L.)

Pseudophasma distinct species.

2 ♀ on foliage.

Schistocerca gypsea type

1 in open spot.

1 Crochus in heavy forest in foliage.

1 Crocharis type ditto.

888 + 6 = 894

(Other 1435 + 1 = 1436

1927. 28 Pozo Azul de Peris,
Costa Rica. Aug. 18, 1927. At
night in house. (R.)

Archimandrita six in chinks in
walls. 3♂, 3♀. Microcentrum

philamum (?) Attracted to light.

Ingrocunius sp. 1 attracted to
light, one hiding behind a loose
board. Anaxipha - dark species -
attracted to light.


Plusiotus attracted to light.

894 + 15 = 909

(Others 1436 + 13 = 1449

1927. 29 Same as 1927. 28
but VIII. 19 & in forest & about
house clearing. (R.)

Pseudophyllodromia in fair
numbers in dead guano and
Heliconia leaves.

Neoblattella sp. ♂ sub-pl. 

as Pseudophyllodromia juv. also taken.

Blattella sobrina quite numerous (♂♂) in guarumo + heliconia dead leaves. sev. juv. taken.

Epilampra azteca type. One running on ground in forest. Paratettix sev. on bare ground in small areas in the forest - heavy shade.

Cremastax 1 sp. on foliage.

Aspilota common in the more open areas in the forest - about house.

Sitotettix rare in the more open areas in the forest. Juv. also seen & taken.

Leptomacanthopora sp. Small in forest on foliage.

Prindlopha juv. only on foliage & in low brush about house.

Graphus sp. One in forest on foliage.

Chiropterus sp. One at edge of small clearing near house.

Chromacris trojan One in forest foliage.

~~Look~~ Coccinatus sp. Same as taken
last evening. Three from dead
heliconia leaves and rolled fresh
ones.

More slender brown pseudophyllid. 2
from rolled fresh heliconia leaves.
Green pseudophyllid. 2 taken
ditto.

Neocomocephalus ads. + juvs. in low
growth in forest and about house
clearing.

Conocephalus sexual in forest
undergrowth.

Large phalangopoid cricket ^(?) hopping
in muddy trail.

Large Pterocanthus or Archaris like
fly lid. 3 ads. + 1 juv. from
dead heliconia leaves + guano
leaves.

Hyperbaenus 2 from foliage
in forest.

Camoptera juvs. abundant in
clearing in low cane.
Minute Neurobia-like sp. ♂ & ♀
in foliage in heavy forest.

large Anaxipha (new to me) blue forest foliage.

Anaxipha - species taken last night - numerous on forest foliage.

$$909 + 102 = 1011$$

$$\text{Others } 1449 + 40 = 1449$$

Same P.M.

Male Bostra in brush foliage near house. Scania on foliage directly in front of house. Amastax + Asmilica ditto. Blorn, Pamphila and Anaxipha at light at night. Nyctibora juv. running on floor of house at night.

Moth + beetle at light at night.

$$1011 + 17 = 1028$$

$$\text{Others } 1449 + 12 = 1461$$

Amnicoris in foliage in front of house.
? Prionolopha juv. ditto

1927. 30 Same as 1927. 29 but
VIII. 20. 1927.

In cleared brush in front of house and in adjacent forest to north for a short distance.

Anaplecta solidly dark species. - one
shaken from hanging dead guarumo
leaves. Anaplecta n. sp. of Mexican
group. 4 ditto.

Pseudophyllodromia ditto.
Hemidromia common in ditto.

Moblattella same sp. as yesterday, less
numerous in ditto.

Moblattella sp. with asymmet. subg. pl.
1 in ditto.

Litopeltis (?) 2 immat. juv. in ditto.

Paratettix several in bare spots in
forest.

Scania a few in foliage.

Silvitettix one ♀ in low brush at
edge of forest sunlight hole.

Cumastax uncommon in low
brush foliage on the edge of and
in sunlight holes in forest.

Amnicoris not uncommon ditto.

Usimilia common, ads. & juvs. in more
open places.

Lioscapheus 1 ♀ on foliage on edge of
Hechroptus 1 ♀ in cut scrub.

Chromocoris brown 1 ♂ in low
brush in front of house.

Colpolopha 2 ♂ ditto.

Cerophas 1 ♂ in forest undergrowth

Microconophalus ♂ & ♀ in more open place near rim.

Phlegis uncommon in low growth, particularly where vines are numerous.

Parocanthus sp. 2 large ♀ from dead guano leaves.

Cenoptera surinamensis Juss.

very abundant in more open places. 1 juv. taken.

Orange. black legged Cenopterid. - 1 ♀ from dead guano leaves.

1 juv. black & white fly lid (near Ectocnus) swept from foliage.

Phyllocirtus both sexes of beautiful species from foliage in open spots. Juss. also.

Xenobius - like type. From forest undergrowth - rare.

very large ♀ Anaxipha - 1 from dead guano leaves.

Band-legged Anaxipha uncommon on low ground foliage.

Small Anaxipha with dark wing tips - numerous in foliage in forest, particularly low & fresh.

Cycloptilum 1 ♀ from dead fraxinus leaves.

$$1028 + 100 = 1128$$

$$\text{Uthus } 1461 + 49 = 1510$$

Same P.M. at light at house.

1 Anaxipha lateralis type.

1 Chorismenus.

1 Epilampra azteca

1 B. Vat.

Anaulacomera alfaroi terminal.

" laticauda terminal.

Schedesia parsonae 1 ♂.

1 Large Anaulacomera diff. sp. ♀.

1 Turpilia with dark mark on pronotum.

1 Holihocercus palatipennis ♂

Small species of Anaxipha.

$$1128 + 37 = 1165$$

$$\text{Uthus } 1510 + 38 = 1548$$

1927.31 Same as 1927.30 but
VIII.27.1927.

On foliage and in bush on
forest edge about house and
for a very short distance up
trail.

Pseudophyllodromia on foliage.

1 ♀ Hemiblabatta (h) " "

Immat. litugressa running on bark of
tree.

Paratettix senegal on low bush leaves.

Scania one on foliage.

Eumastax not rare in fresh foliage -
very active. One pair in crotch.

Allochroplus rare on bush foliage -
hiding low down in twigs.

Amnicoris frequent on ditto.

Imusia one on forest foliage.

Stitettix rare on forest foliage.

Chrysops acris costaricensis uncommon
and active on foliage in sunlight
hole.

Taenioptera sp. One foliage
on forest edge - very active - one
escaped.

Rhincoderma - new species with

white lateral spots - one ♀ on
forest foliage. Spots very con-
spicuous (L.).

Leptomermithoproa brevicauda
♂ 14 on forest foliage

Calpoptilia 2♂ on brush in
clearing

Exerilus abundant everywhere -
ado. & green & brown forms.

Chromocoris frozen found from
foliage in brush clearing.

Thedionotus aculeatus 2♂ & 1♀
ditto. Very active - flying long
distances.

Chrophus numerous on cord
foliage in clearing and in
forest.

Gingreocnemis - large species -
1 ad. ♂ 1 juv. from dead heliconia
leaves.

Corconotus sp. On forest
foliage.

Large brown pseudophyllid with
slender form, 4 from dead heliconia
leaves.

Scoparius 1 ♀ from forest foliage.
" diff. sp. 1 ♂ from Heliconia
leaves in forest.

Neomochtherus 1 ♂ from bush
foliage in house clearing.

Amantia 1 ♀ from forest
foliage.

Phyllos sp. 1 from ditto.

Dugesi large winged sp. 1 ♀
swept from forest foliage.

Paracanthus diff. sp. 1 ♂ on
forest foliage.

Phyllocnistis 1 ♂ from ditto.

Amantia 1 ♂ " "

$$1165 + 60 = 1225$$

$$\text{Others } 1548 + 16 = 1564$$

Same P.M.

Latindia - small amphicarpine
grylled under dead wood.

Chlorophus, Cremilia and

Paratettix in forest undergrowth

$$1225 + 7 = 1232$$

$$\text{Others } 1564 + 9 = 1573$$

1927.32 Same as 1927.31 but
night at light.

$$1232 + 12 = \overset{1244}{\cancel{1232}}$$

$$\text{Uther } 1513 + 17 = 1590$$

1927.33 Same as 1927.31 but
VIII.22.1927.

In frost on slope to North, going
up probably 200 feet above
P.A. elev.

Blutaria num. in ^{dead} heliconia
+ guarano leaves. Pseudophyllo-
dromia on undergrowth foliage.
Neott. nabea from dead heliconia
+ guarano leaves. In Neott. nabea, same.
Neott. s.g. pl. Neott. nabea from guarano.
Neott. s.g. pl. Neott. nabea from dead
heliconia leaves.
Scama from undergrowth foliage.
Parocentrus from rolls of
heliconia leaves.
Amazipha on foliage.
Crochus on foliage.
Rays Zonocnemis in rolled
heliconia leaves.

Coccinotus from same

More slender ~~phylloph~~ pseudo-
phyllid with pale medio-
long. line from same.

Leptomermithopora brevipes
uncommon in foliage.

Amastax numerous some
mature, on fruit/foilage.

Scopionus a few in rolled
Heliconia leaves - sev. juv.

Chlorocirtus ~~preps~~ 1 ♂ resting
on broad leaf of ~~the~~ same plant.
Neocoelophanes one ♂ on low
ground corn.

Ceriolus sp. 1 juv. from rolled
Heliconia leaves.

Chromacris a few in foliage.

$$\begin{array}{r} 1244 \\ 1225 \\ \hline \end{array} + 74 = 1318$$

$$\text{Other } 1590 + 24 = 1614$$

Same, at light at night.

1 Sudderia parvula flew on
veranda.

1 Holichocerus ditto

1 Heterogryllus sp. on tree
trunk near house.

1 Scania on veranda.

3 Gongrocercus on veranda.

$$1318 + 8 = 1326$$

$$\text{Cottus } 1614 + 12 = 1626$$

1927. 34 Same as 1927. 31 but
VIII. 23. 1927.

In forest undergrowth and in
sunlight spots, also along shores
of Rio Parrita.

Pseudophyllodromia a few in
dead Heliconia leaves.

Hemidactylus num. in dead Guarumo
leaves.

Neotattella ♂ a few in dead
Guarumo leaves.

Ceroptera juvs. numerous in
more open spots.

Paratettix on bare spots along
trail.

Chlorophus a few in cut
scrub.

Paracanthus 1 in dead Guarumo
leaves.

2 species of Anaxipha from ditto.

Colpophya 2 ♂♂ in top of
a dead guarumo leaf, 1 ♀ in
low growth.

Chorisia adults + juvs. very
common everywhere - a number
of juvs. taken to show dicromatism
in juvs.

Chumatolampis (?) striking species
1 ♂ on forest foliage near river.

Arthropus a few on forest foliage.

Amnicoris 1 on " "

1 minute but adult Ripipteryx -
quite distinct - along sandy
shore of river - could find no
more by search.

White faced encyrtid - 1 ♀ from
dead guarumo leaf.

Very large Euacris or Heurthron-
green, 1 ♀ spread out on large
leaf of low bush in early
morning.

Large Gangraecinus from sw.

situations, as in dead guarumo
leaves, in curled new
heliconia leaves, but mostly
from one single plant of long
soft but spiny edged Agave,
where they had congregated.
adults & juvs. at base of
leaves.

Cocconotus. Exactly same
comments as for Cocconotus.

Slender brown pseudophyllid
from guarumo leaves and
unrolled heliconia leaves.

$$1326 + \frac{28}{14} = \frac{1326}{14} = 1400$$

Uthus $1626 + 28 = 1654$

Same P.M. at light.

1 Dich. rufa group - one at lamp.

1 Epil. apica running on floor.

2 Archimand. On wall of house

1 Juv. Pitangusa running in
bark of tree stub.

3 ♂ Uates attracted to light

Paratettix attracted to light.

One juv. Hypodacus on dead
brush.

Everything else attracted to
lamp. - Conilia, Crematogaster,
Anaulacamera alfaroi, Dusara,
Acrophus, Lania & Quaxipha.

$$1400 + 29 = 1429$$

$$\text{Other } 1654 + 37 = 1691$$

1927. 35 Same as 1927. 31 but
VIII. 24. 1927.

Most work, undergrowth, foliage,
etc.

Hendroblatta & Quaxipha from
dead Heliconia leaves. Paratettix
from ~~the~~ bare areas in trails.
Chiropterus few in brush in open.

Amnicoris sp. ♂ & ♀ on foliage.

Bostra ♀ swept from hanging
vines.

Trachomimus ♂ from
♂ broad leaved low growth (A.)

Brown pseudophyllid 2 ♂
from dead heliconia leaves.
Emmastax from foliage.
Scoparius from unrolled
heliconia leaf.

$$1429 + 21 = 1450$$

$$\text{Altus } 1691 + 6 = 1697$$

Same at light at night.

1 Angela ♂ came in house
to light.

1 juv. Archimandrita in ^{juv. Amph.} ^{in bark of} ^{tree.}
house. $1450 + 3 = 1453$

$$\text{Altus } 1697 + 0 = 1697$$

1927.36 Betw. Rio Colorado +
Sabarilla, Costa Rica.
Elev. 1500-3940 feet. (R. + L.)
Aug. 25. 1927.

Emmastax from leaves.

Rigorousa from tree trunk.

Pseudophasma flying across
trail. ~~On~~ Criolus from
foliage. [Rio Colorado]

Bostia [Rio Colorado] swept
from foliage + vines.

1453 + 5 = 1458
Others 1697 + 2 = 1699

- 1927. 37 Sabanillas de
Perrio, Costa Rica. 3940-
4200 feet. VIII. 26. 1927. (R.)
Sweeping along roadside, in
strips of forest, in potreros and
vines & in bromeliads.

Anisotaxis annulipes (?) Two taken
from bromeliads in forest.

Pseudophyllodromia large species
numerous on low foliage on
roadside & in forest.

Pseudophyllodromia short species.
One taken with other species.

Anaplecta flabellata type. One running
on low foliage.

Problattella diff. species. One swept
from vines.

Stagmomantis juv. One swept.

Busta sp. 1 General ♀, badly
broken, swept from dense
tangle.

Silvettia communis ♂ & ♀ numerous
in low vines & bushes along road-
sides - all adult. Pupa greenish to
^{palpi} of both sexes very conspicuous.
Alphitoblatta a few in same situation.
Leptocryptus ditto. One
pair in coitu.

Insecta 1 ♀ swept from vine
tangles.

Scopimorpha distinct species,
adults. juvs. occasional but
secured only by steady system-
atic beating of vine tangles and
overhanging branch foliage.

Stelponochlora juv. from foliage.

Gnathocnemis juv. from large
water containing bromeliad.

$$1458 + 52 = 1510$$

$$\text{Others } 1699 + 60 = \text{~~1659~~} 1660$$

at night - same place
& date.

1 Nyctitana juv.

$$1510 + 1 = 1511$$

$$\text{Others } 1660 + 2 = 1662$$

1927. 38 Along Rio ~~Sab~~ Candelaria
a short distance upstream
from Sabmillas bridge, Costa
Rica. Elev. 1500 feet (aner.)
VIII. 27. 1927. (R. + L.)

Aidemona a few in grass

Orphulella ditto.

Paratettix on bare road.

Pseudophyllodromia ^{small} & short-
winged Anaplecta like ones +
snout from foliage.

Juv. Mimotia ditto

" Pseudophyllid from agave.
1511 + 7 = 1518

Others 1662 + 10 = 1672

1927. 39 San Ignacio, Costa
Rica. Elev. of coll. pt. about
3500 feet. VIII. 27. 1927. (R.)

1 Colpolopha diff. species in
low foliage.

1578 + 1 = 1579

1927. 40 Monte Redondo,
Costa Rica. Elev. 4000 feet.
VIII. 27. 1927. (R. + L.)

- 1 Arachnocomma at light.
1 juv. Eurycotis, running on
flwr.

$$1579 + 2 = 1521$$

$$\text{Others } 1672 + 1 = 1673$$

1927.41 Oricuajo (R.R. Sta
Jesús María), Costa Rica.
Elev. 150 m. VIII. 31, 1927. (R. & T.)

Collecting in potreros and in
woods and heliconia patches
on cleared ground.

Blown down by beater
from tree foliage.

Earning gen. sp.? Black tibiae
ditto.

Short-winged Nothaculoid, both
sexes and several stages of juv.
taken from dead heliconia leaves.
Anaplecta large dark sp. Beaten
from tree + vine foliage.

Black Eurycotis, ad. ? T. beat
it from dead heliconia leaf.

Gray Chorismeria 1 ad. from
ditto.

Pimpla 1 swept from vine
foliage.

Stagmomantis sp. juv. imm. - beaten
from tree foliage.

Acanthothespis 1♀ beaten from
tree foliage.

Paratettix from mud areas in road.

Tettigidea ditto.

Cephalella common, ad & juv. in
coarse grass.

Mesia several juv. swept.

Urenilla a few ad. in brush.

Schistocerca 1♀ in brush.

Aidemona a number in grass &
brush.

Cocconotus diff. sp. 1 pair from
dead heliconia leaf.

Gongrocnemis diff. sp. 1 from
same leaf.

Conocephalus abundant, chiefly
juv. in grass.

Ripipteryx same habitat as
Tettigids.

Green Anaxipha, 1♂, 4♀ beaten
from tree foliage.

$$1521 + 80 = 1601$$

$$\text{Others } 1673 + 111 = 1784$$

Same loc. + date.
At night.

In house on walls.

Microblatta tuberculata ad. + juv.
numerous.

Panzeria 1 ♀ on wall.

Proctobia sp. 1 ♂ on wall.

$$1601 + 16 = 1617$$

$$\text{Others } 1784 + 4 = 1788$$

1927. 42 Same as 1927. 41
but 1X. 1. 1927.

Collecting along R.R. track,
under cacao trees with banana
shade, along bank of Rio Machuca
and in various situations en
route.

Blom linearis swept from grass,
tree foliage + bushes. Ad. +
juv.

Latia curvicauda 1 ♂ from dead
banana leaves.

Geracid. 2 ♀ (T.) from under
bark of fallen tree.

Proctotilla sp. simple ♂ subg. pl. In
dead banana leaves & a few beaten
from foliage.

Euthlastotilla 1♂ from dead
banana leaves.

Stagmomantis juvs Beaten from
foliage

Ephialtes numerous in grasses.

Leucocotus holleyi. 2♂, 2♀ sw.
juvs on ground on dead
leaves under cacao except 1♂
taken from tall grass along
Rio Machuca.

Colpophya sp. In cacao grove in
bush, etc. a few.

Aidemona rather generally
distributed - common.

Epshomala sp. 1♀ (T.) from
tall grass along Rio Machuca.

Uremia - like Aidemona.

Anaulacamera laticauda 1♂ 1♀
beaten from low bushes.

Microcephalus 1 ad. ♀ in
low ground cane.

Encephalium sp. In certain
grass patches common, ad. &
juv.

Gyllenus 1 juv. ♀ swept from
bush foliage.

Pygromemus } From dead banana
Ciconotus } leaves, usually
found associated

Heterogryllus on ground trash in
cacao grove.

Paracanthus add. sp. 1♂ 1♀ from
dead banana leaves.

$$1617 + 132 = 1749$$

$$\text{Others } 1788 + 134 = \cancel{1892} \\ 1922$$

Stagmomantis nahua 1♀ swept
from vegetation along R.R. track.

Cibotopteryx variegata 1♂ taken
in forest by bridge keeper
juv. Vilma swept from grass along
R.R. track

1927. 43 Same as 1927. 42
but at light at night.

Pantolonia on wall of house.

Acridoblatta " " " "

Centruroides flew in to lantern

$$1749 + 4 = 1753$$

$$\text{Oct. } 1922 + 28 = 1950$$

1927. 44. Same as 1927. 42 but
Sept. 2, 1927.

Work in old fields, with scattered
trees & wine palms, in low
ground, corn under trees, in
land about heliconias and in
forest edge.

Blow Cicare Beaten from foliage
of trees & heliconias.

Anaplecta swept from foliage.

1♀ Neoblattella sp. " " "

Chorisoneura, white lined, 2 swept
from tree foliage in open.

Stagmomantis viridis 1♀ from
tree foliage in open.

Strang on immat. mantid, swept
from very low ground corn. Running
out-like on leaves - very remarkable!

Tettigidea 1 swept from wet, bare ground.

Cyphodactylus num. ads. & juvs. generally distrib.

Aemilia ditto, same data.

Aidemona ditto, all ads.

Rhinoderma dull brown, sp. 1 juv. ♂ sitting along stem of Heliconia.

Rhinoderma with transverse pale band, 2 ♂ one juv. from Heliconia area, on leaves.

Leucostictus holleyi; 1 ♂ on Heliconia leaves.

Phyllocolpa a few ads. but many juvs. generally distrib.

Cep. phora 1 juv. ♂ swept from tree foliage on forest border.

Insara 1 juv. in low ground corn under scattered trees.

~~Cicada~~ Gongrocercus 1 ♂ on rolled Heliconia leaf.

Green Anaxipha - sm. brown ditto on Heliconia leaves and in low ground corn. ♂♂ & ♀♀ found very scarce, but one seen - taken.

Heterogryllus a few in low
ground cover

Parocanthus a few in heliconia
leaves.

A very slender pyllid, ♀, resembling
the Oriental Eucirtus - one
swept from low ground cover
under scattered trees in open.

$$1753 + 59 = 1812$$

$$\text{Cotesia } 1950 + 98 = 2048$$

Same P.M.

Working along R.R. right of way and
in cacao, in banana leaves, trash,
etc.

Neoblattella ♂♂ + ♀♀, ♂ simple outg.
plate, numerous in dead banana
leaves, a few beaten from tree
foliage.

Ratiblattella sp. 1♀ from dead
banana leaves.

Short-winged Litopeltis-like
thing & small, one from ~~same~~
tree foliage.

Chorionocera large sp. One
beaten from tree foliage.

Chorisonura - white-lined. Beaten
from the foliage and from dead
banana leaves.

Stagnomantis *nahua* 1 juv. beaten
from bush vegetation.

Murexia like *maritima*. One ♂
beaten from low bushes.

Tettigidea 1 ♂ ground sweeping.

Paratettix " "

Ephialtes *juncea*.

Psylla " "

Insia 1 ad. & 1 juv. swept from
tall coarse grass.

Aidemara *juncea*.

Emmerya 1 juv. & swept from
low growing corn.

Neonophanes 1 ♀ from dead
banana leaf.

Pyrgocnemis a number in ditto.

Amantia 2 ♂ & 1 ♀ swept
from low growing corn and
low bushes.

Phyllocnistis in low growing corn.

Schistocerca 1 taken from

tree trunk.

Anaxipha swept from ground com.

Picrocanthus from dead banana a
leaves.

Cycloptilum 1 ♂ from tree trunk.

Emeoptera terre. numerous juv.
in ground com under cacao.

$$1812 + 70 = 1882$$

Citrus $2048 + 47 = 2095$

1927.45. Same as 1927.44 but
at light at night.

Panchlora sev. in wall of house.

Acontiotheopis 1 ♂ came to light.

Stagnomantis rubra type 1 ♂
came to light.

Stagnomantis ~~rubra~~ androgyna type
1 ♂ ditto.

Phlugis + Anaxipha ditto.

$$1882 + 8 = 1890$$

Citrus $2095 + 23 = 2118$

1927. 46 Atalanta Farm, Estrella
Valley, Costa Rica. Elec.

IX. 7. 1927. (R.)

Collecting in dead banana leaves
and sweeping ground in ~~at~~ banana
plots.

Mollatella rubra not common in
banana leaves.

Mollatella 3 other species, in
relative abundance as represented
in the series, all in dead banana
leaves.

Epilampra agtea one in banana
leaves, one flew on train car.
Small insect. Mottled with pale
lateral borders, in banana leaves.

Small pimplid-like mantid,
2 juvs. 1 swept from low ground
corn, the other from dead banana
leaves.

Walking stick - near Xeromma 1 juv.
swept from ~~the~~ low corn in ground.

Truxalis benesimilis ad. ♂ & a juv.

ditto.

Usmilia numerous in ground
corn.

Taenioptera reticulosa 1 ♂ under
banana on ground corn. All
seen.

Microtylopteryx talamancae
not common in low ground corn,
in foliage.

Scudderia sp. 1 in low bushes,
in pt.

Neurocephalus sp. ♂ + ♀, 1 from
dead banana leaves, others in
low ground corn foliage. Num. juvs. also.

Encephalus sp. Not common
on ground corn.

Gnagronus add. sp. 1 ♂ from
dead banana leaves.

Phlegis sp. 1 swept from low ground
corn.

Anaxipha un. species. Swept from
low ground corn.

Anaxipha large sp. 1 ♂ ditto.

Symphylorhynchus sp. Ad. & juv.
Swept in a very restricted area
of low ground corn.

1890 + 120 = 2010
Others 2118 + 48 = 2166

1927. 47 N. end of Surotha
Trail, near Atalanta Farm,
Eschella Valley, Costa Rica.
IX. 8. 1927. (R!)

In heavy forest along Hurray River.
Sweeping, beating, etc. Forest
much like that above Uesta Farm.
Mefinid juv. swept from low
undergrowth.

Notatella uhua Small from
platanillo leaves.

Epil. azteca type. Small ditto.

Hugmormantis sp. 1 ♂ beaten from
bush.

Walking stick s. juv. - sp. ? ditto.

Paratettix sp. On bare ground near
water puddles.

Large tettigid. ditto.

Cermapoda sp. On foliage in
fair numbers.

Myiascis miniatula One on
forest foliage.

Al. bimaculata In fair numbers
on ditto.

● Rhachiocampa sp. One ♂, 1 ♀,
+ sev. juvs. on fruit + fruit.
Scarce & active.

Uremia numerous.

Sphynotopum sp. 1 juv. on
fruit foliage.

Orophus Numerous.

Neomorphalus a few on low
ground and in dead leaves.

Gyllalis 1 juv. in dead
leaves.

● Copiphora cultigera 1 ♀ beaten
from low foliage.

Copiphora diff. sp. 1 juv. ♀
ditto.

Scopionus sp. 1 ♂ 1 ♀ from foliage
(beaten).

Brown pseudophyllid, 1 ♂ 1 ♀
beaten from foliage.

Pucca ad. + juvs. numerous,
as juvs. on low foliage, ads.
very scarce.

● All 4 sp. of Anaxipha on
low foliage.

2010 + 76 = 2086
Uthus 2166 + 35 = 2201

1927. 48 Same as 1927. 46
but 1 X. 8.

In dead banana leaves, beating
in cane brake and in small
areas of weed grown plots.

2 species of Moblatella, both from
dead banana leaves. Virtually all
seen taken. Paratettix a few
on bare spots of soil.

Scopinus & Scapt from tall weeds
& vines. Microcephalus sp 2
ditto. Microcephalus sev. ditto.

~~They~~ Symphloxiphus from weedy
lot. Anaxipha from tall weeds.

2086 + 48 = 2134

Uthus 2201 + 22 = 2223

1927. 49 Same as 1927. 47 but
1 X. 9. 1927.

1 juv. Epilampra swept from foliage.
Heavily-built tettigid swept from
ground in muddy road, with many
pools of water.

Microtylopteryx talamaense occas.
on frust foliage.

Pseudophyllodromia 1 swept from
foliage of undergrowth.

Rhachicnema sp. Occasionally taken
on frust foliage.

Emmastax sp. ditto.

Copiphona long spined species 1♂, 1♀
taken. One in calla-like leaf rolled,
other swept from low corn.

Brown Scopoid-like pseudophyllid
One from rolled calla-like
leaf.

Large brown short-winged pseudophyllid
ditto.

Green immature pseudophyllids.
swept from low foliage.

Ponca numerous in ground
corn, immatures predominating.
Active.

♂ Green Anaxipha, two swept from
low foliage.

Short-segmented brown peculiar
cricket & brown immature cricket
with annulate antennae
swept from low corn foliage.

Brown Anaxipha ditto.

Periplaneta brunnea 2♀♀
taken at Atalanta House,
IX. 8. 1927. in domo.

$$2134 + 56 = 2190$$

$$\text{Others } 2223 + 9 = 2232$$

1927. 50 Atalanta Farm, Estralla
Valley, Costa Rica. IX. 9. 1927. (R.)

All three species of Periplaneta
indom in the house in the
morning. $2190 + 4 = 2194$

$$\text{Others } 2232$$

1927. 51 Same as 1927. 46 but
IX. 10. 1927

Exactly same type of
work & habitats.

1 Pseudophasma diff. species
flying in banana.

Microglopteryx talamancae
occas. in low ground corn
in banana grove.

Small mantid, a few immatures
from dead banana leaves.

Crematogaster abundant in ground

can.

Banded-legged Anax ipha -
one swept from ground near
straw-colored Anax ipha - one
ditto.

Pitopeltis 1 ad. ♀ & 1 juv. shaken
from dead banana leaves.

Pseudophyllodromia sp. Occasional
in dead banana leaves.

Neoblattella nahuatl ditto, also a
juv.

Three smaller species of Neoblattella
generally distr. in ditto.

$$2190 + 100 = 2290$$

$$\text{Others } 2232 + 38 = 2270$$

1927. 52. Guapiles, Costa Rica.
Elev. 18. 11. 1927. (R.)

Sweeping in orange orchard, in
dead banana leaves, in rotting
banana trunks & in a few
small bromeliads on orange
trees.

Psalis americana 1 ad. & 1 juv.
under rotting banana trunk.

Sarcinatrix anomalia 1 fine adult
♂ shaken from very small dry
vine bromeliad in orange. Exclusive

search in many other similar bromeliads failed to bring others to light.

Neobattella sp. 2 ♀♀ + 1 juv. taken from dead banana leaves.

Chorisoneura sp. 2 juv. same as Sarcinatrix.

Lamprodelia (?) sp. 1 apparently adult ♂, but entirely apterous, running under dead banana root.

Paratettix sp. ads. + juv. on banana roots in orange orchard.

Uphidella punctata a few in orange orchard.

Clavilia a few in ditto.

Taeniopoda reticulosa 2 ♂ 2 ♀ seen + taken in orange orchard and on base of a royal palm.

Symphyloxiphus sp. very abundant in frass in orange orchard.

Anaxipha banded-legs. 1 in ditto.

All seen.

Anaxipha 3 other species, occ. in ditto. Virtually all swept were taken.

$$2290 + 117 = 2407$$

$$\text{Others } 2270 + 11 = 2281$$

1927.53 Same as 1927.52
but at night at light on the
verandas of "Salvador."

1 immat. Richemondia (?).
on wall.

1 Anaxipha at light.

$$2407 + 2 = 2409$$

$$\text{Others } 2281 + 26 = 2307$$

1927.54 La Cienilia, Costa Rica.
IX.12.1927. (R.)

In forest where work was done
in 1923. Working sweeping

low ground, ground sweeping
heavy beating; platanillo dead
& alive & other dead leaf work,
in & under rotten wood.

Spuridex (?), with Lat. tegmina.

1 under dead wood.

Ischnoptera nahuia 1 ad. ♂ & two juvs.
from hanging dead leaves.

Metatattella sp. ♂ ♀ 1 ♂

from ditto.

Very large sp. of Eurycotis (prob.
what I called Rampopeltis imm. type)

1 ad. ♀ + 1 juv. under dead wood
Cynops like phaeus. 1 ♂ swept
from low undergrowth foliage
Scardia sp. a very few on low
ground cover.

Paratettix sp. along more open
portions of trail where ground is
bare in places.

Emmastid, 1 im. - juv. beaten from
low undergrowth foliage.

Procolpia or Munatia sp. 1 very sm.
juv. swept.

Rhachiceraea sp. Rare, ads. +
juv. on low foliage.

Microtylopteryx fus. fumis a few
ads. + juv. on ditto.

M. hubardi Rare, ditto. local.
One spot only.

Myracris annulata 1 ♀, all
seen, on low foliage.

Cerophus a very few ^{ads.} on undergrowth
a number of juv.

imm. phanog. ^{green} pseudophyllid
trupt.

Brown immat. pseudophyllid
shaken from having dead leaves
and vine draped leaves.

Large, short-winged true pseudo-
phyllid in curled green heliconia
leaves.

Paracanthus sp. 1 ♂ on low foliage.

Heterogryllus sp. 1 ♂, 1 ♀ under

low foliage, just above ground.

Ripisteryx sp. on low foliage on trails in forest.

Mitrypa very large sp. 1 ♀ shaken
from dead leaves (hanging).

$$2409 + 58 = 2467$$

$$\text{Others } 2307 + 49 = 2356$$

1927. 55. Guapiles, Costa Rica.

IX. 12. 1927. (R.). Sweeping &
beating along screen of guayabo
and melastomaceous trees between
railroad right of way & potrero
for some distance west of
station.

Pseudophyllodromia swept
from low bushes. Miniature
blattid, same. Chorisoneura
add. sp. from foliage of melastomaceae
tree. juv. Acontiothespis swept
from low bushes. Range

♂ Calymna on a very low
grounded bush, not a foot from
the ground. Paratettix scarce
on barren spots. Leptomeria thoprona
a very few in ground cover.

Aryasacris oratipennis 1 ♂ & 2 juvs.
all seen, taken. In bush foliage -
active. Color very brilliant,
gem-like

Taeniopoda reticulosa 1 ♂ on
base of royal palm at Salvador.
Copiphora sp. with long curved,
spear-like vertex, 1 ♂ in very
low bushes - not active, taken
by hand. Pale caudal margin
of pronotal disk and reddish
patches on sutural margin of

Legumin, also pale spines on
caudal femora, very pronounced
in life.

Scopionus sp. 1 ♂ swept from
bush foliage.

Aphenomorphus sp. 1 ♂ in bush
foliage.

Anaxipha add. sp. with rugulose
legumina in ♀, 2 swept from
bush foliage.

Anaxipha palmer sp. ditto (!)

$$2467 + 21 = 2488$$

$$\text{Others } 2356 + 47 = 2403$$

1927.56 Same as 1927.53 but
IX.12.1927.

Neotlatilla ♀ in window screen
at night.

$$2488 + 1 = 2489$$

$$\text{Others } 2403 + 12 = 2415$$

1927.57 Same as 1927.54 but
IX.13.1927.

Work done almost entirely in
dead leaves, chiefly plataniillo,
flamms of same, hanging dead

vines; dead leaf masses and
dead polar. stands. Rain a
large part of time.

Proctos sp. ov. ♀♀ from *Pulegioides*
blossoms. No ♂♂ in evidence
Euclyptus sp. 1 ♂♀ from dead leaves and
flowers much & dark.
Gnathochorax sp. 1 ♂ + 1 ♀ juv. from
leaves
Gnathochorax maxillaris type. 1 from same.
" *maxillaris* 2 ♂ " "
Pterophoridae cf. *P. pilos.* near;
from plantain leaves & dead
leaves.

Neoblattella nahuas ad. & juvs. in
dead platamillo leaves, in dead
guarumo leaves & in hanging dead
vines & trash.

Neoblattella sp. ♂ ♀ More frequent
in same, also in Heliconia flowers.
Neoblattella sp. ♂ ♀

Neoblattella sp. ♂ ♀ much less
identical in some.

Chromolaena sp (dark downy)
a few in dead vines & tangles
of trees with much dead leaves.

~~Pseudo~~ Macrophylledromia

maximiliani 1 specimen from
dead frond of palm. Crushed
somewhat in capture. A second
got away. Exceedingly active.

Mugila (?) sp. 1 ad. ♀ taken from
a thick mat of hanging dead
vegetation.

Litopeltis sp. A number immature,
femal stages, from Heliconia
bicolor.

Catantidia, pale species, 1 ♂ beaten
from hanging dead ~~the~~ vines &
leaves in tangle.

Immature. micropodid Myrmica, beaten
out of tangle of dead vegetation.

Ceryx like phaeus, 1 ♀ 1 juv.
Both beaten from dead stuff
hanging in undergrowth.

2 immat. Pseudophyllids beaten
from ditto.

Anabropsis marmoratus 1 ♀
beaten from heavy mat of dead

sticks & leaves reaching against
the trunk about 4 feet up.

Deatrypon sp. 2 species beaten
from dead stuff.

Ephemoniphora 1 ♂ ditto.

Euphranta sp. 2 ad. ♀ & juvs.
in two stages. all beaten from
dead stuff, including leaves of
plantain.

Anaxipha large species } All taken
" 2 sm. species } from green
foliage of
framed fern
in some open
places.

Cetonia - like sp. (new
to trip). 2 ♂, 1 ♀ all beaten out of
dead ~~leaves~~ hanging stuff.

Pipipteryx one swept, along trail.

Mimeticia 1 juv. from dead hanging
vines & leaves.

$$2489 + 68 = 2557$$

$$\text{Other } 2415 + 52 = 2467$$

1927. 58 La Ceñilia, Costa Rica.
IX. 13. 1927. (R.). In bananae &
coffee along the R.R. track.

All material, unless otherwise
specified taken by shaking & beating
dead banana leaves (all hanging).

Sarcinatrix anomalia, locally
common, a good series of both
sexes - young taken by continued
work.

Prolatia sp. 1 ♂ Taken same way.

Neobattella nahua. Two

" smaller - at least 3
species, probably more.

Series taken should show
relative abundance as almost
none escaped.

Epitanyra albonervosa - 1 ♀.

Emycolis sp. 1 juv. under dead
banana trunk on ground.

Chrysomura white-lined species.

One, all seen.

Pseudomicropterus infusata. One
beaten from banana leaves.

Taeniopoda reticulosa. 1 ♂ hopping
along track.

Hypoburnus (?) 1 nearly adult ♀,
1 quite immat. ♂ beaten.

Anaxipha banded-legged. spec.
One beaten.

Anaxipha angulosa? terminata sp.
One beaten.

Cyclopternus sp. 1 ♀, not mature,
beaten.

$$2557 + 84 = 2641$$

Others $2467 + 17 = 2484$

1927. 59 Same as 1927. 57 but 1X. 14. 1927.
The day (morning) being bright, more
green foliage work was possible,
particularly in the small clearings
made by cutting logs.

Salix americana a small colony
ado. & sev. young in & under a fair
sized rotting log.

Pyrausta 1 ♂ from dead vegetable
matter - rotting foliage in a
hanging mat of vines & twigs.

Paraspratta picadori (?) 1 ♂ from

Same type of material in another situation.

Neoblattella nahua 1 swept from foliage.

Neoblattella smaller sp. 1 ♀ ditto.

Pseudophyllodromica tayer sp. on low foliage. 3.

Anaplecta mexicana type. 1 from hanging mat of dead foliage.

A. lateralis type. 2 swept from vegetation 1 common.

A. black species. One from under dead wood.

Epilampra add. sp. One from hanging dead twigs & vines.

Rhynada sp. 1 ♀ from dead and ^{Epilampra} Rhynada sp. 1 ♀ from dead stilt roots of a palm stump.

Calolampra 1 ♀ from under dead tree trunk.

Small black ♂ Mionyx like sp.

1 ♂ swept shaken from dead foliage.

Choradexis serillae 1 female

♀ beaten from low (3 feet) weed like vegetation in cutting clearing.

Cecrop-like phacoid. A number
of juvs. beaten from foliage &
from tangles of dead briars,
etc.

Plumides (?) sp. 1 immature
snout from overhanging foliage.

Scania sp. Ads. & juvs. numerous
on low foliage - exceedingly
active. Ads. all with green
in their coloration very evident.

Chrysina (?) sp. (One snout
from ground).

Leptotettix Senilis, ditto.

Leptotettix (?) sp. (One, ditto).

Cremastid juvs. from green foliage
of undergrowth.

Rhynchocera sp. juvs. only in
low foliage in cutting.

Microgaster lucifera. juvs.
ditto. but not common in all
undergrowth where we can
penetrate. Ads. & juvs.

M. hebardii Ads. & juvs. Similar
habitations, but less numerous
& more local. ~~very active~~
Both species active and good

jumpers.

Chromacris brizon 1 pair swept
from undergrowth foliage.

Nicarchus euzalus first ♀ taken.
Jumping in low weed-like foliage
in cutting, along side of a large
log on which I was walking. Spent
probably not 50 yds. from where I
took the 1st male four years ago.
That was taken on top of such
a log!

Urophus large species. One ♀
from low foliage - but a few
seen.

Urophus smaller elongate sp.
18 ditto. Same comment.

Phlugis 1 spec. swept from low
foliage, all seen.

Immature pseudophyllids beaten from
undergrowth foliage.

Ripipteryx large species. A few on
ground even foliage in cutting.

Ripipteryx smaller species. Same
comment.

Porcia 1 ♂ in lucorum in
cutting. All seen.

Amphicnistus sev. juvs. from
dead hanging mats.

Prothama (?) One ♂ from among
stilt roots of palm stump (seara
palm).

Pale lined Metrypa 1 ♂ shaken
from hanging mat of dead fronds,
leaves & mould.

Large Anaxipha ~~one~~ two foliage.

Sm. " with corrugated
tegmen. ditto.

Cycloptilum 1 ♀ from hanging
mat of dead vegetation.

Gorgemus balloon bodied beetle
from dead wood (stump).

Great diopsid fly with hammer
head, in foliage.

$$2641 + 88 = 2729$$

$$\text{Others } 2484 + 40 = 2524$$

1927. 60. Grapiles, Costa Rica.
IX. 14. 1927. (R.)

One Taeniopoda reticulosa at

base of royal palm in grounds of
"Salvador".

Trogoniza trees about broken cells
on veranda of same.

$$2729 + 1 = 2730$$

$$\text{Cestus } 2524 + 31 = 2555$$

1927.61 Same as 1927.60 but
at light at night on verandas.

Gryllacris in glass screen.

$$2730 + 1 = 2731$$

$$\text{Cestus } 2555 + 12 = 2567$$

1927.62 Same as 1927.59 but IX & 15.
and not in the same forest, but in
an area of second growth forest but about
a mile above La Cuicila, and probably
a hundred or so feet below other working
points. Forest largely *balsa* and *garitán*,
with some *guarumo*, ~~low~~ under trees
averaging about forty feet with
undergrowth in open spots and
along edges very rank and high,
areas of *Sacaton* grass intruding
in places. Under heavy canopy shade
was dense and conditions
more nearly approximated the
"montaña alta."

Spandex percheroni 1 ad & 1 juv under
dead wood.

Pseudophyllodromia small species
shaken from hanging dead balsa
leaves and also swept from foliage.
Short-tegm. Dochnoptera - 1 ♂ from
under dead wood.

Anaplecta analisgnata 1 from dead hanging
balsa leaf.

Gandy comment. Pseudomopine ditto.
Anaplecta 1 each species - under dead
wood.

Neoblattella
Dochnoptera naheia a number from
hanging dead balsa & guarumo
leaves.

Neoblattella slender sp. ♂ & ♀. Neumera
ditto.

Neoblattella (?) much darker spec. same
comment. The two taken together.
H. ♂ & ♀ 1 single male. From dead leaves.

Epilampra ♂ & ♀ shaken from dead
leaves.

Muzoa (?) 1 ♂ from under dead
wood.

Stagmomantis add. short-winged sp.
1 ♀ + 1 juv. swept from high green
vegetation in forest margin.

Heterogonysa maya one specimen
running up & down moss & lichen
covered trunk of garilana tree.
Procrustism marked. Exceedingly
active & difficult to capture.
Small ♀ immature mantis. Shaken from
dead leaves.

Plumides (?) beaten from dead vines,
twigs etc. hanging from tree.

Pseudophasma sp. flying in forest.

Tylothrix (?) among dead leaves scattered
on lower parts of forest floor in
heavy shade.

Enmastax 1 on green undergrowth
foliage on forest margin.

Truxalis in sacaton & similar
grass in open spots.

Urophidella a few in detritus.

Usmilia only a few on forest border.

Leptomerinthopora not uncommon
in the more open spots, very
active.

Rhachicnaga 1 juv. in forest
Microdylopteryx fusiformis not
common, in forest & in same
situations as Liptomeria theophrasti.
Myiasca bimaculata 1 ad. & 1 juv.
♀ from foliage of undergrowth in
forest border. 1 add. ♀ seen but escaped.
Search located no males - possibly
reason is nearly over.

Nautia pitasatum 1 fine male
empt from foliage of undergrowth
just within edge of forest.

Anabropsis crotaricensis 1 juv.
from under dead wood.

Gryllacris sp. 1 fine ♂ beaten
from hanging dead leaves (baloa).

Large Crotophaga a few in forest
& along border - from - from
phases - all of latter seen
Taken.

Medium-sized Crotophaga more
common - in some open spots -
all few.

Anaulacomera sp. 1 ♂ beaten
from undergrowth ^{foliage} forest on
border of forest.

Phlaegia sp. 1 taken from same.

Triolus sp. 1 ♀ " " "

● Cnecphalus sp. 1 juv. ♀ in open
from sacaton.

Sphyrnotopos 2 juv. on ground
in forest.

Mimotica sp. 1 juv. from dead
leaves.

Gongroneris add. sp. 1 ♂ from
dead leaves.

Immature, pseudophyllid, ditto.

● Pezomachus a very few in forest.

Chlaenius 1 ♀ in forest on low
growth.

Anaxipha 2 sp. on border foliage
(undergrowth).

?? Amurogryllus (hardly), a
short-segmented heavy built gryllid,
3 ad. ♂ juv. ♀♀ + juv. ♂ all
under dead wood, logs, stumps,
etc.

$$2731 + 121 = 2852$$

$$\text{Others } 2567 + 53 = 2620$$

1927. 63 Same as 1927. 58
but IX. 15. Habitat exactly
the same, but an extension
of the same soil.

Sarimatrix anomalia very local &
not as numerous as in the area
examined previously.

Neottatella species. As before.

Blackish distal, pale lined Anaplecta -
2 from dead banana leaves - another
recaped.

Epilampra abdomen-nigrum 1 ♂ &

1 ♀ from dead banana leaves.

Miopterygid mantid ♀ from same,
Anaxipha from ditto.

Aphronomorphus " "

Taeniopoda from gnaphis at house.

$$2852 + 66 = 2918$$

$$\text{Others } 2630 + 8 = 2628$$

1927.64 Siquirres, Costa
Rica. Elev feet.

IX.16.1927. (R.).

Work done among bananas,
sweeping under bottom and
shaking dry leaves.

Microtettella + Anaxipha from
dead leaves.

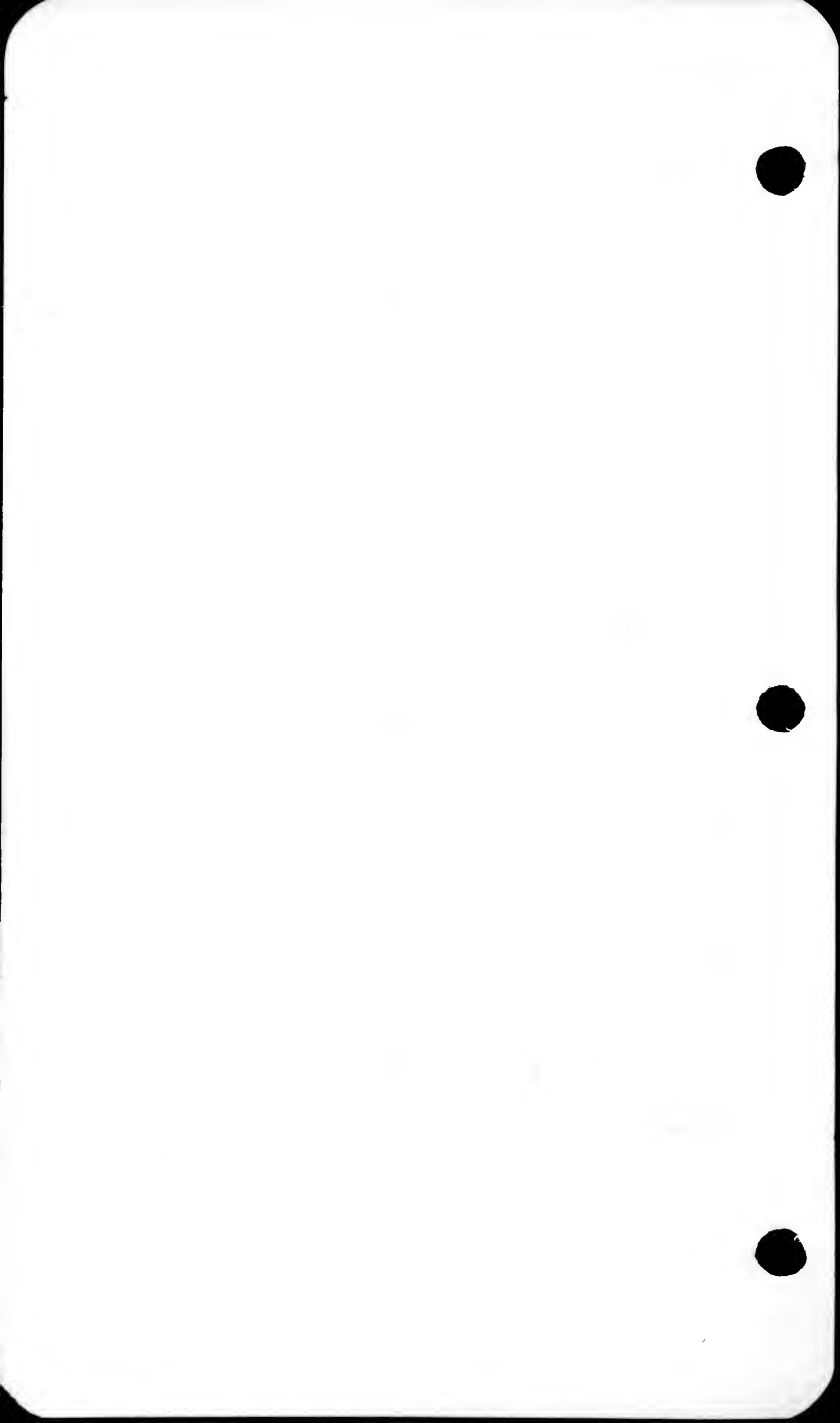
Symphylorhynchus, Neconocephalus,
Leptomermis thopora &

Microleptonyx, taken
from weeds. Phlugis + Conocephalus
Juv. Pseudophyllid for dead
leaves.

Aphononormus ditto

$$2918 + 48 = 2964$$

$$\text{Albas } 2628 + 23 = 2651$$



Honduras

1930

1930. 1. Tella, Honduras. June 30, 1930.

Tamnopoda centurio numerous,
and mating, along R.R. right of
way and eating plant resembling
burdock. Males chorused when
disturbed. Males call them
"chur-lur", in account of noise
made as they sail. (E-W) Epheula
in short grass along same.

26

Other

4

1930. 2 Rosario, Honduras. ~~700~~ feet.
July 9, 1930. 5150

Wrote about windows. Insects in
grass on trail. Passalus & other
beetles along trail.

With $1 + 26 = 27$

Other $9 + 4 = 13$

1930. 3. Same as 1930. 2 but July
10, 1930. Beating, sweeping

& picked along trail alongside
of flume, around Grand Pina

Blanca. Macharona 1 ad. swimming
in ditch (V.T.E). Zooprasmus sp.

2 ♂ beating (V.R.) Sphenarium-like
sp. immature, all beating low brush

along trail. Acemilia juv. same. Chrys-
crura j. ditto. Inara & Cerophus
juv. ditto. Chrysophus (?) juv. Eumastix
juv. ditto. Chorionura 1 ♀ beating
vegetation. Ripipteryx sweeping along
trail. Stenomantis similarly secured.

$$\text{Certs. } 20 + 27 = 47$$

$$\text{Others } 202 + 13 = 214$$

1930.4 Same as 1930.2 but VII-11, 1930
and elevation ⁷⁰⁰⁰ to 6500 feet.
5150-5500

Beating, sweeping and picking
trail side and into tangles
and pocket. J.T.E. went as
high as 5800 feet into high mountain
forest.

Chorionura 2 ♂ shaken from
hanging dead leaves. Neotattella
sp. juv. only, shaken from under
overhanging mats in wet bamboo.

Sermyle juv. beaten from foliage.

Episactus - like Empoasca - large,

1 ♂, 1 ♀ taken by J.T.E. in heavy
forest, on ground. Silvitettix (?)

1 ♀ ditto. Zospoeremus (?) beaten
from trail-side thicket. 3 ♂.

Hopp seen. Not a particularly
 active jumper. *Phumarius* like
 all juvs. Beaten from trail-side
 vegetation. *Camelia* (?) juv. ditto.
Chorophanes juv. 2 ditto. *Phum.*
 1 ♀. Taken from dead leaves.
Acridothera - *varicosa* or near, 1
 juv. dead leaves. *Pipistrellus*
 swept from ground along trail
 Weat. $37 + 47 = 84$
 Other ins. $144 + 214 = 358$

1930.5 As 1930.3 but taken by
 V.T.E. with light out night in
 darkness. *Chorophanes* 2 ad.
 Weat. $2 + 84 = 86$
 Other ins. = 358
 5150
 579 + 18.

1930.6. As 1930.4 but at night.
 Taken mostly in house, small number
 in yard.
 Weat. - 86
 Other ins. 29358 = 302

1930.7 As 1930.2 but V.II.12, 1930.
 Beating, sweeping & scattering of dead
 leaf work along trail by flames.
 Rain or fog regular. *Choriamma*
 2 spp. taken from dead leaves

Juv. *Neohallia* ditto. Glabrous
& pseudomorph from ^{not} near
mossy bank. Juv. *Crangon*
& *Spharion*-like as previously.

Trichomanes in low shrubby. Micro-
centrum of resting with leaf of tree.

Juv. *Lucina* shaken from dead leaves.

Cycloptilum ditto, ad. & juv. *Rhipidopteryx*
snout from ground of tree. *Hexata*
& juv. from dead leaves.

$$\text{Total } 15 + 80 = 101$$

$$\text{Taken in. } 01 + 360 = 421$$

1930. 8 Same as 1930. 3 but

VII. 13. 1930. Beating, sweeping
& picking along stream bank
shrubbery to *Vina Blanca*
patch and ~~the~~ beyond.

Lucina ac. 18' 1/4 shaken from same
dead leaf. *Chorismura* 1/4 taken
from shrubby. *Amphile* 2 juv. ditto.
Imm. *Spharion*-like and
Cornelia (?) ditto. *Microcentrum*
ad. 3 & imm. from ditto.
Secanthus juv. ditto. *Rhipidopteryx*

on bare ground of trail and slope
of cut bank.

$$\text{Cush. } 15 + 101 = 116$$

$$\text{Other ins. } 126 + 421 = 547$$

1930.9 as 1930.8 but VII.14. 1930 +
elevation ~~5850~~ ⁵⁹⁰⁰ ~~6000~~ feet. In very steep
forest ravine above Peña Blanca
and along road to latter.

Pass 18 beaten from hanging
dead leaves in heavy forest. Scumple
4 pins. ditto. 1 immat. flattened
ditto. *Protoparvus* *eximius*
in short grass and low bushes
along road just below Peña Blanca
nothing else seen.

$$\text{Cush. } 25 + 116 = 141$$

$$\text{Other ins. } 43 + \frac{547}{\cancel{547}} = \cancel{590}$$

1930.10 as 1930.9 but different
elevation 2 immat. ⁶⁵⁵⁰ ~~6900~~ feet.
With ⁶²⁰⁰ ~~6600~~ feet (epiphytic (V.T.E.)
(C.B.W. *Graminella*)

$$\text{Cush. } 141$$

$$\text{Other ins. } 3 + 590 = 593$$

1930.11 As 1930.10 but 5750 feet.
5150

Tropidacris resting on rail
of steps to house. Short. legm.
Pseudomyia beaten from vegetation
hanging from under eave tank.
Leucophaea from shrubbery, beaten
+ swept. Stagmomantis 2 juvs. swept
from shrubbery. Rhipidura on ground
of trail and on low leaves of
small foliage. Paratettix 2 specimens
swept from bare ground of trail.
Green Ophionotus-like juvs. on
foliage. Cryptus 1 ♂ on foliage
along trail.

$$\text{Orth. } 34 + 141 = 175$$

$$\text{Other ins. } 60 + 593 = 653$$

1930.12 As 1930.11 but VII.15.1930
Moths at light in Am.

$$\text{Orth.} = 175$$

$$\text{Other ins. } 21 + 653 = 674$$

~~1930~~ Same afternoon
~~5500-5700~~ feet.
5100 - 5450

Pipipteryx common along
road. ~~the~~ Neoxalca beaten from
shrubbery. Footpans 1/2
along road on ground.

Leish. $15 + 175 = 190$

Other vis. $17 + 614 = 691$

Same evening - moths at
light.

Leish. = 190

Other vis. $11 + 691 = 702$

1930. 13 Roarrio, Honduras.
Cloud forest. ⁶⁰⁰⁰~~5400~~ feet. C.A.W.
Leish. = 190 VII. 16. 1930.

Other vis. $2 + 691 = 693$

1930. 14 Roarrio, Honduras.
⁵¹⁵⁰~~5700~~ VII. 16. 1930. Moths at
light taken in air. Also pair of
Leish. = 190
Other vis. $25 + 693 = 718$

VII. 17. 1930

1930. 15 Same as 1930. 14 but
along firmer trail, same elev.
sweeping, beating & picking. More
1 ♀ taken from hanging dead leaf.
Short-winged ♀ blatted from dead
leaves & sticks under cut bark.

Juv. Blattids ditto. *Chorionura* 2 ♂
from dead leaves. Juv. *Scymnus*
ditto. Juv. *Stagmomantis* ditto.
Tettigidea sp. 1 ♂ on shade area along
trail, long search produced no more.
Paratettix 2 spp. - grassy spot near
bark. ~~But~~ *Tetranotus* sp. 1 ditto.

♀ *Truxalis* in shrubbery along trail.
Ripipteryx along trail in shrubbery.
Insana juv. beaten from foliage.

Orth. 15 + 190 = 205
Other ins. 78 + 718 = 796

1930. 16 Same as 1930. 14 but
VII. 17. 1930. Moths taken in
morning about light.

Orth. = 205
Other ins. 23 + 796 = 819

1930.17 Cloud forest above Rosario,

Honduras. ~~6000~~ - ~~6500~~'; VII.17.1930.
6100 - 6400

Trail side work in heavy forest.
Little seen. One immature *Speothos*
under bark on log - nothing else
there. 4 ♂ *Tamias* along in small
grassy spot.

Dist. 5 + 205 = 210

Other ins. 25 + 819 = 844

1930.18 Rosario, Honduras.

~~5700~~ - ~~5800~~'; Back road. Along
5150 - 5300'

road, cut on land a small area of
grass. VII.17.1930.

Cypholophus punctatus in grass.

Chiefly immature a common in that
condition. *Tettigidea* sp. 1 in grass

area. *Paratettix* in grass along side
of road. *Ripipteryx* ditto and on
bare road.

Dist. 10 + 210 = 220

Other ins. 63 + 844 = 907

Machaeoceros 1 ♂ J.T.C. along fence trail
in grassy spot.

1930.19 Rosario, Honduras. ⁵⁵⁰⁰~~5400~~ feet. ⁴⁹⁰⁰⁻~~5400-~~ VII. 18. 1930. Trail
side + forest edges.

Latid of 8 from under bark of dead
stems (forest edge) - Immat. *Stagnum*.
bark from under foliage. *Diaphanum*
1.7 - 1 juv. ditto. large *Cumastoid*
a. ground at base of rock shoulder,
in very low hedge, forest edge.
Immat. *Cumastoid* bark from
shrubbery. open. *Sphenarium* - like juv.
ditto - always green. *Ophidella*
♂ & ♀ in same situation as
large *Cumastoid* *Ripistegus*
along road. *Desm.* juv. bark from
open shrubbery.

$$\text{Cerb. } 12 + 226 = 238$$

$$\text{Actino ins } 98 + 907 = 1005$$

1930.20. Rosario, Honduras. ⁵⁵⁰⁰~~5400~~ feet. VII. 18. 1930. Paths at light in
am.

$$\text{Cerb. } = 238$$

$$\text{Actino ins. } 3 + 1005 = 1008$$

1930. 21 As 1930. 3 but VII. 18, 1930.

One swept from foliage, 18. Large

Emmactoid I near grassy wet spot, but back against foot of rock wall, where much drier. No more found, even after extensive search.

$$\text{Crest. } 2 + 238 = 240$$

$$\text{Other ins. } 57 + 1008 = 1045$$

1930. 22 As 1930. 20 but VII. 19, 1930.

$$\text{Crest. } = 240$$

$$\text{Other ins. } 49 + 1045 = 1094$$

1930. 23 Cantarranas, Rio Grande valley, Honduras. Elev. ~~1500-2000~~ 2200 feet. VII. 20, 1930.

Rich bush vegetation, heavy bush and trees with many acacia type trees, some very large and spreading types. ~~Large~~ potreros of pinna grass, areas of sugar cane and small patches of bananas. No bull-horn acacias but many other types both arborescent and shrubby some of latter with tassels of red thread-like blossoms. Along with tangles of trees and vines, monkey ladder vines, but

no dense lowland forest and about
1000-1500 feet below pine zone.
No plantainillo seen and almost no
epiphytes on masses. No *Psephenus* ^{few large dead leaf masses}
seen and *Chrysops* ♀ taken from
hanging vines. *Empididae* *mexicana* 2 spec. from small dead
leaf clusters - all seen. *Neobittella*
♂ and *Latibittella* 2 ♀ from
dead leaves and hanging vines, some
seen wash in tank shrubbery, all
beaten - no ♂♂ seen. *Pseudomops*
♂ & juv. from low shrubbery, 1 adult
seen & lost. Striking *Emetacid*
with most vivid colors in low woods
and in garden of hacienda, most
immature, 3 ad. ♂ & 2 ad. ♀ taken. Moderately
active, but few lost. In color (from
freshly killed ♂): body above shining
emerald green, becoming turquoise
blue on head, apex of abdomen. abd.
around solidly carmine, above seen of
abd. segments before abd. apex becoming
pale turquoise blue with.

transverse black patches proximal,
a medio-long. fine black line: rem-
ainder of head turquoise blue, eyes
black, antennae black with 2
prox. segments pearl, post-ocular line
black; lat. lobes of abd. of dorsal color
with slight golden tendency, propleura
& coxae of ceph. limbs carmine; meso-
and metapleura turquoise blue,
microst.
a ~~coxae~~ coxae carmine, metast. coxae
whitish; lat. apople of abd. turquoise
blue ventrad of lat. series of black
patches, center of abd. pearl,
meso & metathorax turquoise blue
with greenish reflection; base of
color all limbs greenish straw yellow,
lined with black.

Orphelilla punctata very abundant
generally in wady spots and in
francisco. Largely common.

Thryothorus 2 only. in same low
wady areas of same habitat. A
vigorous jumper.

[illegible]

$$\text{Orth. } 85 + 240 = 325$$

$$\text{Other ins. } 195 + 1094 = 1189$$

1930. 24 Rosario, Honduras. 3750,
~~750~~ VII. 10. 1930.

Beetlepl. up in lower
 parts of hill.

$$\text{Orth. } 1 + 325 = 326$$

$$\text{Other ins. } 2 + 1189 = 1191$$

1930. 25 Same as 1930. 24 but
 Dec. VII. 11. 1930. Beetlepl.
 in place of light.

$$\text{Orth. } = 326$$

$$\text{Other ins. } 13 + 1191 = 1204$$

1930. 26 Same as 1930. 25 but VII.
 22. 1930. Am.

$$\text{Orth. } = 326$$

$$\text{Other ins. } = 25 + 1204 = 1229$$

1930. 27 Rosario, Honduras. VII. 22,
 1930. Cloud forest. ~~5400~~ ⁵⁵⁰⁰ feet. Along
 Pina Blanca forest trail. Beating,
 sweeping, etc. ♀ *Praxinos beatus*
 from overhanging mat of roots, soil,
 etc. Juv. Sparatoid from under
 bark. Male short-winged *Pseudomysia*
 beaten from dead leaf masses. With

for male Choricimura. Larger
phasmid from arborescent
bromeliad, smaller from leaf and
twig tangle. [Range eumastoid
locally numerous along trail, usual
on near dead leaves, but occasionally
in green stuff. Active but JJ rather
deliberate in jumping: ♀♀ more
active and harder to secure, also markedly
protected in coloration. Juv. eumastoid
same condition - same species?

Comptosia-like species common
locally. Juv. jumpers but not particularly
wary. Found in dead leaves and
on green areas equally. Juv. Isara
beaten from dead leaves and twigs.
Juv. pseudophyllids all from
dead hanging leaves. Akabropsis
sp. 5 ♀♀ all beaten from soil
of undercut, on hanging banks,
no males found after persistent
work, occurred in three spots.
♀ flatiron pyllid from hanging
dead leaves.

Orth. $67 + 326 = 393$
Other ins. $33 + 1229 = 1262$

1930.28 As 1930.25 but VII.
23.1930

Orth. = 393
Other ins. $18 + 1262 = 1280$

1930.29 As 1930.27 but VII. 23.1930.

♀ *Chorinaura* beaten from dead
leaves. ♀ shining pseudomorphid
ditto. Proo ♂ & ♀ + juvs. all
beaten from hanging dead
leaves. males scarier, juvs.
predominating. Others as of
VII. 22.1930. *Ripipteryx* along
trail - true ground. Color phases
of *Carpodacus* - like breast
pronounced - very different.
♀ of heavy cinnabarid very
variable in color tone and very
efficiently protected - ♂ on other
hand rather evident.

Large moth disturbed from dead leaves.
Orth. $42 + 393 = 435$
Other ins. $25 + 1280 = 1305$

1930. 30 Peña Blanca, Rosario,
Honduras. ~~5400'~~ VII. 23. 1930.

All taken at night at lights
about office, compressor house, etc.

Large phalangopoid resting on
building. Blow 2♂ on wall.

Empoasca - like ♀ on wall.

Orth. 4 + 435 = 439

Other ins. 107 + 1305 = 1412

1930. 31 Same 1930. 25 but VII. 24,
1930. Works about light in A.M.

Orth. = 439

Other ins. = 29 + 1373 = 1402

1930. ³²~~31~~ Same as 1930. 8 but
VII. 24. 1930. Same type of work.

Chorizanthe 2♂, 2♀ shaken from
hanging dead leaves. Ins. Neoblattella
ditto. Paratettix one in grass along

foot of rock wall. from ~~from~~ ^(ins.) ~~from~~

pygmaeorhina swept from

trail side vegetation. Empoasca
like beast on low ground

Common - mostly, 2♀. Leptocryptus

Leptocryptus sp. low road.

Machaerona sp. 2 ♂, 3 ♀, 1 juv. on
bare rocks of Peña Blanca
wash, all seen taken except 2
♂♂, latter sex quite wary, & ♀
not at all easy to catch. Not
very much like *Sphingonotus*.

Oxyphus sp. 1 ♂ except from trail-
side foliage. *Oecanthus* juv.
ditto. *Nesobrya* juv. ditto.

Ectecurus - like juv. shaken from
dead leaves.

Orth. $22 + 439 = 461$

Other ins. $102 + 1305 = 1407$

1930.33 Peña Blanca, near
Rosario, Honduras. VII. 24. 1930.

All at light. J. T. Emery, Jr.

Orth. $1 + 461 = 462$

Other ins. $52 + 1407 = 1459$

1930.34 Same as 1930.33 but
VII. 25. 1930. Most about light in
am. Others about house.

Orth. $= 462$

Other ins. $75 + 1467 = 1542$

1930.35 Rosario, Honduras.

Summit trail ~~5444-5600~~ feet.

VII. 25. 1930.

4800-5000

Immature blattids (Neoblattella sp.)
beaten from hanging dead leaves.
Large emphastoid, spp along side
of trail in leaves and low vegetation -
all seen. Empoasca is - like least
same situation - mostly males, quite
active. Passer 1 ad. ♂, juv. numerous
in all stages. Microcentrum stylatum H31
resting in broad-leaved foliage.
Juv. Ectophasia beaten from
hanging dead leaves.

Arb. 16 + 462 = 478

Arb. ins. 69 + 1544 = 1604

1930.36 Rosario, Honduras.

In pine. ~~4800~~ 4400, VII. 25. 1930. C.B. Worth

2 white tailed hemipters. -
one shot in flight
the other taken from
trunk of tree.

Arb. = 478

Arb. ins. 2 + 1604 = 1606

1930.37 Rosario, Honduras.

various dates in July, 1930. mat.
from, but *Neopelmatus*
which is VII. 25. 1930.

Orth. $1 + 478 = 479$
Other ins. $11 + 1606 = 1617$

1930.38 As 1930.25 but VII. 26. 1930.
Moths about light in Am.

Orth. 479
Other ins. $11 + 1617 = 1628$

1930.39 As 1930.9 but VII. 26. 1930
Elev. 6400 feet.

Prunus 2 ♂, 1 ♀ juv. beaten from
hanging dead leaf clusters. 1 juv.
Campoblatia in dead leaves on ground
by shiny pseudomopid shaken from
mat of leaves and twigs. large
cunestoid ♂ & ♀ seen taken
in drier spots of trail, on dead
leaves and on rock faces, ♂♂ scarce,
♀♀ much more numerous, taking
refuge in denser stuff off
trail when pursued. ♀♀ with
protective coloration most pronounced
with eyes equally dark prominent.

Comptosia like species in same
areas as *sumatrensis*, ♂♂ more
numerous than females and
very active. Immat. pseudophyllid
hanging from dead leaves.

Orth. 29 + 479 = 508

Other ins. 16 + 1628 = 1644

1930.40 Rosario, Honduras.

6300 - ~~6400~~ Main trail on ridge.

VII. 26. 1930. (Emlen - North) Cloud forest.

Orth. = 508

Other ins. 20 + 1644 = 1664

1930.41 Rosario, Honduras.

VII. 27. 1930. Moths at light in AM.

Orth. = 508

Other ins. 22 + 1664 = 1686

1930.42 (Between Rosario and
Cantarranas, in pine and oak
belt, elev. ~~4100~~ 4200 feet. VII. 27. 1930.
Pine area, in part solid and dense, but
usually open and park-like, with
oak scrub and other shrubby components
numerous fan-palms scattered
through. Grass adpressed crab-grass
type, areas of bare sloping rock.

58 1 ♀ large *Neoblattella* taken
from dead hanging leaves of fan-
palm. Immature of species of same subf.
with black dots to pronotum all
taken similarly. *Eutetrasticta*
1 ♂, 1 ♀ ditto. 1 *Ep. angusta* *albomaculata*
taken from same. 1 ♂ *Eurypterus*
abdominalis taken from same - immature
much produced no more. Juv. *Blattell*
from under dead wood. *Chorisoneura* 1 ♀
all taken from hanging dead fan-
palm leaves, apparently. *Perisoma*
are common, *actes* no *Myrmica*
seen. 1 ♂ *Holcampa* taken from
same. 1 ♂, 1 ♀. *Peristictus* hanging on
leaf sp. to. 1 ♂. *Tettigidea* + imm.
juv. in same fashion and from same
surface. *Ephialtes* app. near
discolor, common in grass.
also much localized, *Q. typicus*
taken, only find no adults.
Juv. *Sphingonotus* like in same situations,
not common. *Leptis* 1 ♀ along
leaf. All *perisoma* taken
from hanging

dead from palm leaves. *Lyptilum*
found in grass areas. *Lyptilum*
♀ & juv. all shown from dead
palm leaves. 1 *Tringoides* ditto.

$$\text{Orth. } 70 + 508 = 578$$
$$\text{Other ins. } 48 + 1686 = 1734$$

1930.43 Same 1930.41 but VII.28.1930
Moths at light in Am.

$$\text{Orth. } = 578$$
$$\text{Other ins. } 8 + 1734 = 1742$$

1930.44 Peña Blanca, Rosario,
Honduras. VII.28.1930. Moths
attracted by lights. Am. (J.T.E.)

$$\text{Orth. } = 578$$
$$\text{Other ins. } 65 + 1742 = 1807$$

1930.43 Additional moths

$$\text{Orth. } = 578$$
$$\text{Other ins. } 6 + 1807 = 1823$$

1930.45 As 1930.43 but VII.29.1930.
Moths & beetles at light in Am.
Hemipt. & *Heliconia* in garden
of house.

$$\text{Orth. } = 578$$
$$\text{Other ins. } = 8 + 1823 = 1831$$

1930.46 Rosario, Honduras. Lumber
trail ⁴⁸⁰⁰⁻⁵¹⁵⁰ ~~200-5700~~ feet. VII. 29. 1930.

All, taken from foliage of trail-side
vegetation unless otherwise indicated.
Chrysomelids & *Curculionids* from hanging
dead leaves. *Epiphyllus* few in a little
place pocket along trail. *Pyllus* 3 in
ditto. *Pipistrellus* in road.

Orth. 10 + 5, 8 = 588

Orth. ins. 126 + 1831 = 1957

1930.47 Rosario, Honduras.

^{5150'} ~~5700'~~ VII. 29. 1930. Moths at
light at night.

Orth. = 588

Orth. ins. 4 + 1957 = 1961

1930.48 Peña Blanca, Rosario,
Honduras. 6300 feet. VII. 29. 1930.
Bertho ex W.A. Vickers.

Orth. = 588

Orth. ins. 2 + 1961 = 1963

1930.49 As 1930.45 but VII. 30.
1930 Am.

Orth. = 588

Orth. ins. = 7 + 1963 = 1970

1930.50 Peña Blanca, Rosario
Honduras. VII. 30. 1930. (All three)
Moths about office building in
Am. Phalangopoids in mine
in old timbers, rock walls, etc.,
active jumpers.

Catch. $23 + 588 = 611$

Catch vis. $95 + 1970 = 2065$

1930.51 Rosario, Honduras.
VII. 31. 1930. Moths about office in
Am.

Catch. $= 611$

Catch vis. $10 + 2065 = 2075$

1930.52 Peña Blanca, Rosario,
Honduras. Moths about office.
Am. VII. 31. 1930. Moth - Culex.
Catch. $= 611$

Catch vis. $= 17 + 2075 = 2092$

1930.53 Same as 1930.3 but
VII. 31. 1930.

Beating, sweeping & picking
from trail side vegetation.

Phixa-like species 1 of all
seen, beaten from foliage.

Sphenarium-like species -

no adults, few immature -

Specimen taken largest seen.
Chironomus species juv. only
seen.

Orth. 10 + 611 = 621

Other ins. 40 + 2092 = 2132

1930. 54 Cantarranas, Rio Grande
Valley, Honduras. 2200 feet.

VIII. 2, 1930. In garden ground &
immediately about house. Chiefly
beating. Chironomus 1 ♂ beaten
from garden weeds. Cryptellus
punctatus exceedingly common.

Thysanotus but 1 ♂ seen, taken.
Argemone species typical but
moderately common; few taken.
Lactista few in ^{the} path. Hydro-
notus 1 juv. in weeds. Uranium
1 large juv. ditto, numerous very
small. Aidemus 1 ad. taken,
many juv. Crochus 1 ♂ 1 ♀ taken
in weeds. Anaxipha 1 ♂ ditto.
Campoplex 1 ♀ ditto. Anaxipha
small pale species ♂ & ♀ taken
beating. Other cecidids, much.

1 ♀ *Ectenus*-like, all bristly.

Orth. $32 + 621 = 653$

Other inv. $45 + 2132 = 2177$

The same later (J.T.E. Jr.)

Orth. $= 653$

Other inv. $32 + 2177 = 2209$

1930.55 Cantarranas, Rio Grande
Valley, Honduras. 2200 feet.
VIII. 3. 1930.

In potrero, and in timber screen
along bank of river.

Blom linearis ♂ ♀ swept. veg. along river.
Immat. Blomapt. ditto.

" Nyctibora shaken from hanging
dead leaves along river.

Chorisoma ♂ ♀ ditto

Neoblattella ♀ "

Immat. Sermyle ditto.

Thyspilon ♂ ♀ in low veg. along
river shore.

Erphulella punctata abdt. in
potrero and in low weeds
along river.

green *Sphenarium*-like leaf-
1 terminal adult ♀, others -
juv. In low muddy veget.

Helicostictus ♂ & ♀ a few on stony
spit in river, exp. by low water.

Clasmitia ♂♂ in muddy vegetation.

Immature green leaf-like body died
beaten from veget. along river bank.

Immature ♂ brown pseudophyllid
beaten from hanging dead leaves.

Anaxipha sp. (large). 1 ♀ beaten
from foliage.

Juv. *Ectecurus*-like for hanging
dead leaves.

Orth. $21 + 653 = 674$

Other ins. $113 + 2209 = 2322$

1930.56 As 1930.55 but VIII.4. 1930.

In muddy field, with shrubbery, near
house.

Chorismura ♂ + ♀ beaten from

shrubbery. Immature. Heterid. (*Pseudomura*?)

letto. *Serrigyle* juv. beaten
from shrubbery.

Immature. Tettigids from very low
weed foliage, about six inches or so
from ground. Brilliantly colored
Cerambycids abundant, usually
local, generally a pair near one
another - one in center, active, both
sexes equally good jumpers, about
half still immature. Note adult
♂ - with brown tips of abd. - phase
or distinct? Found on foliage
from near ground level to as high
as five feet. Cephalothorax punctatus
common, mostly immatures, from
ground usually numerous. Thyopline
common, very active, 1 ♀ adult
one immature, immat. ♀ ♀
seen. 1 Psylla on tree
sp. sphero-cylindrical like
1 ♀ very small. Imm. Dicro-
chus (?) swept from low weeds.

Artemisia a few adults, imm.
very abundant in a number of
instars. - in weeds chiefly.

Aidemma azteca adults fairly num.
juv. swarming in a number of
nests - mostly fresh.

Urophus in fair numbers, seen on
weed foliage. Anantacamera ditto.
Eucera 1 ad. swept, a number of
juv. - mainly v. small, seen
Phanogastera sp. 1 ♂ & juv. in foliage (low)
nests abundant. Eriolus sp. 1 ♀
swept from leaves. Conophalus sp.
juv. - swarming, all adults seen
2 ♂, 2 ♀, taken. Juv. Anaxipha
1 (juv) swept. Actenus sp. ♂ & ♀
& juv. all swept. Oecanthus large
sp. 1 ♀ swept from foliage of
shrubbery. 1 ♀ Hiattysa from
low leaves of larger tree.

$$\text{Orth. } 175 + 674 = 849$$

$$\text{Other ins. } 96 + 2322 = 2418$$

1930.5) Same as 1930.56 but VIII.5. 1930.
Along shaded road & in potreros, sweeping,
beating and picking.

1 ♂ Latiblattella sp. beaten from
foliage. 1 juv. ♀ Acontiothespis sp.
ditto. Sermyla sp (?) 1 ad. ♂ & number

Juv. from foliage, vines & dead
leaves and mats of dead vines. 1 juv.
Pettigrid from ground in damp spot.

Brilliant emerald green from lower
foliage - numerous. Cyphodactylus
punctatus common, generally ditto. in
disturbed land. Thyropilum sp. local,
females scarce, 2 taken - latter
sex exceptionally active jumper,
taking refuge in heavy tangles.
Rachista sp. one on ground where
rarely seen. Sphenarium - many
juv. - 1 ♂ 1 ♀ adult, & adults very
active jumpers. Crochus numerous
on low bushes & tree foliage. Anac-
anura ditto - ~~Acrida~~ Cryptotriton
2 ♂, 1 ♀ swept from foliage.

Conocryptus sp. juv. abundant,
adults scarce, on ground com. &
low foliage. Juv. pseudophyllid
from dead leaves. Insara 1 ad.
from foliage. Phlugis juv.
from low foliage. Large dark

Hapithus type, 1 ♀ beaten from
dead net hanging in vines. Arachnis
sp. 1 ♀ from foliage. Large maxilla
ditto.
Orth. $56 + 849 = 905$

Other inv. $145 + 2418 = 2563$

Same afternoon. Same work but in
part in patch of banana - along
R.D. Grande.

Neblattella ♂ ♀ from hanging dead
banana leaves. Semiole (?) sp. small
beaten from foliage. Thyrioptilon sp.
2 ♂ of foliage. Conocephalus
from tall grass. Stegomyia ♂ ♀
ditto - small, beaten. Cycloptilon
from hanging dead banana leaves.
Large pale maxilla with pattern
ditto.

Orth. $17 + 905 = 922$

Other inv. $37 + 2563 = 2600$

Same evening

Stegomyia named ♂ at light in
house. Hapithus ♀ ditto.

Orth. $2 + 922 = 924$

Other inv. $3 + 2600 = 2603$

1930. 58 Same as 1930. 57 but

VIII. 6. 1930. Beating and

hanging along trails, partly

exposed with spiny leaves, etc.,

leaves, etc. 1 juv. taken from

foliage. 1 juv. ditto

except from foliage. 1 juv.

juv. sp. taken from mats of

leaves and foliage. Brilliant

unmarked in fair sp. in lower

stems. Thyophrus few in

low vegetation. Leptista, a few

spots along road. Anulacoma

sp. three ads. D. L. taken from

leaves. Brilliant Leptista

taken from mat of Leptista

dry stems of Leptista and

yellow green, becoming very pale

flavous green in Leptista and

limbs; portions of Leptista and

pronotum and Leptista - dorsal

bar on Leptista - dorsal

bar on Leptista - dorsal

extremities of the femora and
ext. ~~distal~~ prox. portion of tibiae
purplish red; face and
facial region shining
black. ocelli golden yellow; antennae
of femora, color with prox. jt. purplish
red; eyes deep amber brown; tip
of femoral color becoming more
diversely dotted.

$$\text{Orth. } 30 + 924 = 954$$

$$\text{Other ins. } 37 + 2603 = 2640$$

Same afternoon. Along road
to upper potrero, with tree & cane,
jungle tangles, vines, etc.

Neolobophora? 1 juv. beaten from
foliage. Brilliant Eumastix
in fair numbers, but a few taken.
Sphenarium-like, small juv.

common. 1 ad. ♀ taken (Kusur).

Daphnolalla punctata common,
mainly juv.

Thyridopteron in fair numbers. 1 taken.

Pericoma immat. very abundant, 1
 ad. ♀ Taken from used store.
Anacloasma 2 sp. ? etc
 taken from foliage - many juv.
 in several instances.

Phixa ? sp. 1 juv. dett.

? *Microgaster* sp. 2 juvs. in notes
 preceding maturity, taken from
 foliage, extensive search
 failed to adults.

Microgaster sp. juvs. - browned,
 19 adults, 1 ♀ taken, usually
 in low used.

Ectoparas - like 1 ♀ & 1 juv. from
 foliage - taken.

$$\text{Arch. } \frac{20}{17} + 704 = 774$$

$$\text{Other inv. } + 2670 = 2007$$

1930.57 Same as 1930.58 but
 Nov. 7. 1930. Beating and
 sweeping foliage, etc. along
 road between electric plant
 and "Concordia".

Capitattella 1♀ swept from foliage.

Hagnumantis juv. ♀. ditto.

Sermyla (?) sp. 2♂ 1♀, latter from swept from various types of roadside foliage.

Brilliant unfastened in fair numbers.

Brown unfastened 1♀.

on low scrubby foliage with preceding.

Thryophilus a few, one taken.

Cactista one on bare road.

Helicobus " " " "

Crochus 1♀ beaten. Anaulacomera

1♂, 3♀ ditto. Microcentrum

1♀. ditto. Striking large

pyllaricus 1♀, ditto, 1 juv. ♂.

ditto.

Hapithus 1♀ ditto.

Ecturus-like, 1♀ 2 juv. ditto.

Orth. 24 + 974 = 998

Other ins. 54 + 266 = 320

1930. 60 Same as 1930. 55
but VIII. 8. 1930.

Beating and sweeping foliage
of trail-side vegetation, trees.
Shrubbery, vines & low comm.
Blow lin 18 swept. Skendzyle 1 ♀
1 juv. ditto. Latiblattella sp. 1 ♂,
2 juv. shaken from foliage.
1 ♂ Chorionura ditto. 1 juv.
Pseudomops ditto. 1 juv.
Hymenomantis braten. 2 ♂, 1 juv.
Struggle (?) from vines and
leaf tangles. Brilliant
Curatricula in fair numbers
in low comm. Thysanotus a few,
1 juv. in low comm. Asphondylia
punctata numerous, Aidemona
numerous in low comm.
Phrixia juv 2 swept from
foliage. Phaneroptera
Rhinoderma 2 juv. beaten
from mat of dead vine stems.

1 ♀ beaten. Anaulacamera
in fair number, beaten.

Microcentrum (?) juv. a number
in several instars - one taken.
Musa 2 - 1 ♂ 1 juv. beaten.

Emmephagus mainly juv. & numerous.

Quanthus 1 ♂ beaten. Hapithus

sp. 4 ♂, 1 ♀ beaten. Ectocorus

1 ♂ 1 ♀ beaten. Emptanotus

1 juv. beaten. Pygospila

maxillosa beaten. Emilia

lyolopha 1 juv. beaten from
house, etc.

July 12, 1915

June 10, 1915

Same afternoon. Exact similar
condition in fields and pasture
near house.

Anaplecta sp. swept from
vine tangle. Latiblattella ♀
beaten from tree trunk.

juv. ♀ Acontiothespis ditto.
Syrnyle (?) sp. ad. ♀ beaten
from dead vine tangle, juv.
(green); from bushes. Brilliantly
colored unmarked in fair
numbers. Urophylia punctata
common. Vidua ditto, juv.
swarming. Alcedonides juv. ♀
in low round ~~set~~ corn.
Manacus in bushes.
Acantus 1 ♀ beaten from
low bushes. juv. cricket
encopted with punctal pattern
ditto. juv. cycloptilid from
tangle of vines.

$$\text{Arct. } 21 + 1070 = 1091$$

$$\text{Litter in. } 57 + 2779 = 2836$$

1930.61 Same as 1930.55 - but VIII.9.1930.
Beating, sweeping + picking on
road by upper potrero and along road
east of gate.

Clon 1 ♂ impt. Skalistia 1 ♀ + 1 juv.

ditto. Lutimattella 3 ♀, Neobattella

1 ♂, 1 ♀, Chorisomura 3 ♂, all
impt from foliage, chiefly of
trees. Stagmomantis rubra, 3 ♀♀
+ juv. from foliage of low growth.

Thin juv. Mantid from foliage of
dry twigs + vines. Juv. Acontisthespis

♀ impt from low can. Semiole (?)

sp. 2 ♂ sev. juv. from both tree
and bush foliage. Walking

stick resembling Rhabdoseratites

1 ♀ juv. from dead leaves and
twigs. Other spined-head Walking
stick 1 juv. ♀ similar situation.

Tettigidea sp. 1 ♂ from low foliage.

Brilliant Camastax innumera.

Urophylia punctata innumera,
more adults than a few days

ago. Thryphron a few in

low can, ♀♀ nigrescens innumera.

Sphenarium - like, not common,
 3 ♂, 1 ♀ taken, a few juvs. preferably
 in one quite rank smelling
 weed. Lactista 1 in bare
 road. Aridemona numerous in
 low corn. juv. Blidromotus in
 very low ground corn. Rhinoderma
 2 juvs. beaten from vine foliage -
 a stem? Chrysops a few
 in the and in foliage. Anallagma
sp. ditto, ♀♀ much
 more frequent than A. lucana
 a few from low corn. Camptotrochus
 from tree foliage. Cecanthus ♀
 from tree foliage. Neoxalva ♀
 ditto. Leckia and Digitaria
 similarly taken and from dead
 vine stems.

$$\begin{aligned}
 \text{Orth. } 79 + 1571 &= 1170 \\
 \text{Orth. in. } 89 + 2136 &= 2225
 \end{aligned}$$

1930.62 Same as 1930.55 but
VIII.10.1930.

Certh. - 1170.

Cether ins. 4 + 2925 = 2929

1930.63 Same as 1930.2 but
VIII.12.1930. At lights in
Am.

Certh. 1170

Cether ins. 8 + 2929 = 2937

1930.64 Rosario, Honduras.

⁵
~~6-100~~ feet. VIII.12.1930. In cloud

forest, largely second growth.

1 ♀ polished pseudonapis under
bark of dead stub. 1 juv. ♀

Neolobophora ditto, very small juv.

Sparattus ditto, under same bark as
Neolobophora. Extensive search made
for adults of each, without results.

1 ♀ adult Cephalodoides along edge of
trail in forest. 2 ♀ Ambropis (?)
beaten from under edge of overhanging
cut bank.

Certh. - 8 + 1170 = 1178

Cether ins. - 28 + 2937 = 2965

1930.65 As 1930.35 but

VIII. 13. 1930. Same elevations.
Beating, sweeping, etc.

Choridactylus 18, 1 ♀ 1 juv. beaten from
leaves and dead stuff. 1 juv. *Stagnum* -
montis from leaf foliage. 1 ad. ♂

Borbia sp. at Rosario, 5150 ft., on veranda
of inn house at noon. *Sphenarium* sp.

1 ad. ♀ resting on upper surface of
leaf of "lengua de vaca", this swept
from various foliage. *Stikania*
aphyllaria 3 ♂. 2 ♀, in that spot.

along side of trail, from then
previously. *Schistocerca* 1 juv. on

leaves of trail-side vegetation. *Micro-*
stylatum H31

Centropus 1 ♂ on foliage. *Anaulacomena*
1 ♀ ditto 1 ♂ *Crotophaga* ditto. *Phaenocarpa*

Juv. ditto. Both. 20 + 1178 = 1201

Other inv. 89 + 2965 = 3054

1930.66 As 1930.12 but VIII. 13. 1930

Same.

Ditto. = 1201

Other inv. 11 + 5004 = 5015

1930.67 Same as 1930.3 but

VIII.13.1930.

from trail side veg
♂ Chorisomura beateri, Paratettix

Impt from damp ground at first
water trickle (Puña Blanca) Emmastix
juv. only on vegetation. Striking
Clypeulellids a few males in low
vegetation against rock wall.

Sphenarium - juv. only in foliage.
Impt. Juv. Schistocerca on foliage.

Crochus sp. 1♂ Impt. - trail side

Doana sp. 1 juv. " " "

Acanthus - juv. " " "

Nexatra 1 juv. " " "

Orth. - 19 + 1201 = 1220

Other ins. 71 + 3065 = 3136

1930.68 As 1930.12 but VIII.14.1930.

Am. Orth. = 1220

Other ins. = 17 + 3136 = 3153

1930. 69 June 20 1930. 27 but
VIII. 14. 1930. Timpine little
production. Praso 18 4 juv. ♀

Shaken from same clump of dead
leaves as furnished shaken for species
primarily of. *Thomomys*, ♂ & ♀ from
horizontal and hanging dead leaves.
Pres. black staining from these under
piece of dead leaf on ground.
Adult ♂ sample small species
leaves from these and foreign
in specimens of *Thomomys* ♂ & ♀
specimens on ground and in low
cave locally. Also a few. *Thomomys*
Thomomys ♂ & ♀. *Thomomys* ♂ & ♀.

From same as preceding but small
specimens large and less foliage-
rich. *Thomomys* ♂ & ♀. *Thomomys* ♂ & ♀.
From *Thomomys* ♂ & ♀. *Thomomys* ♂ & ♀.
From *Thomomys* ♂ & ♀. *Thomomys* ♂ & ♀.
From *Thomomys* ♂ & ♀. *Thomomys* ♂ & ♀.
From *Thomomys* ♂ & ♀. *Thomomys* ♂ & ♀.

With 56 + 125 = 1276

With 34 + 115 = 3187

1930.70. Rosario, Honduras.
5150 feet. Aug. 15, 1930.

Ischnoptera sp. under boards
in shed. Moths at light at
club. Cuth. $1 + 1276 = 1277$

Other ins. $30 + 3187 = 3217$

1930.71 Pena Blanca, Rosario,
Honduras. 5900 feet. Aug. 15, 1930.
(C.B. moth.)

Moths about mine buildings
attracted by lights.

Cuth. - 1277

Other ins. $28 + 3217 = 3245$

1930.72 In pine belt, below
Guacamayas. Same as 1930.42.
4100-4200 feet. Aug. 15, 1930.

Large *Neotattella* ♂, ♀ & juv. all shaken
out of dead, hanging palm leaves. Juv.

Pseudomops beating from foliage

& from dead palm leaves. *Chorismene*
♂ & ♀ foliage & palm leaves. from

Chorismene 1 ♂ beaten from low

tree foliage. Glabrous pseudomopid
shaken from dead palm leaves.

Stenomyza sp. ad. - juv. ditto.

Juv. Stagnomantis beaten from
foliage. All Tettigids - species

4? of Paratettix, Telmatettix &

Tettigidea ~~beaten~~ swept from

bare ^{gently} sloping rock exposure or
very short grass margining

same - abundant. Orophulella

punctatula abd. in ^{short} grass. Brilliant
orophulellid 1 ♂ in low cane.

Sphenarium-like few juvs. only in

~~low brook~~ low brook. Insara 1 ♂ swept
from foliage. Pseudophyllids 1 ♂

& juvs. all shaken from hanging
dead palm leaves. Cycloptilum

all ad. & juvs. from ditto. Pale

Anaxipha ditto.

Orth. 113 + 1277 = 1390

Orth. ins. 81 + 3245 = 3326

1930.73 Rosario, Honduras.
5150 feet. Aug. 16, 1930. At
light in A.M. Ischnoptera
dead on veranda of house.
Pseudophyllid with moths
and Cypris at club lights.
Orth. 2 + 1390 = 1392
Other ins. 44 + 3326 = 3370

1930.74 Peña Blanca, Rosario,
Honduras. 5900' Aug. 16, 1930.
(CWN) Moths attracted by lights.
Orth. = 1392
Other ins. = 11 + 3370 = 3381

1930.75 Same as 1930.73 but
VIII. 17, 1930.
Orth. = 1392
Other ins. = 19 + 3381 = 3400

1930.76 Rancitilla, near Tela,
Honduras. Elev. 80 feet. VIII. 23,
1930. Immediately about house, picking
beating and sweeping garden.
Anaplecta 1 ♂ swept from hanging
vine tangle. Chorisoneura 1 ♀
ditto.

Brachia 1♂ on outside of window
screen. Leptogidea sp. 1 on
low vegetation. Ceph. punctata,
few in tall grass. Amnicurus
~~litocarpus~~ sp. 1 juv. ♀ swept from hanging
vine tangles. Aspilota sev. all
juvs. in tall grass. Phanopterus
sp. 1♂ 1 juv. on creeds a tall
grass. Anaclacomera sp. 1 ♀
ditto. Phlugis sp. 1♂ ditto.
Conophalus juvs. common
in tall grass, few adults, 1 ♀
taken. Anaxipha sm. brown
species numerous on low
tree foliage and in hanging
vine tangle. from Anaxipha
1♂ 1 braten from low tree
foliage.

$$\text{Arch. } 21 + 1392 = 1413$$

$$\text{Other vis. } 104 + 3400 = 3504$$

1930.77. Same as 1930.76 but VIII.

24. Work in second growth
rain forest along stream,
with bananas, coconut palm
& bamboo.

Neoblattella mahua fr. very numerous
in hanging dead frarums and
banana leaves, associated with E.
abdomen-nigrum & N. debens group.

Neobl. debens group moderately
numerous in ditto. Neoblattella ♂
♂ occasional in ditto. Chromatonotus
sp. ditto. Epilampra aldo-nigrum
abundant in dead hanging banana
and frarums leaves. Pseudophyllodromia
sp. numerous sweeping low foliage

Stagmomantis bolina (?) ♂ swept
from low foliage. Tettigids swept
from dead leaf stems present
with frarums and leaf tangles
in second growth forest. Amblytropidia
species occasional in grass and
low weeds on edge of second
growth forest. Alphe. pinnata

occas. ditto, mostly immature.
Lactista sp. one taken on bare
soil of wall. Comilia adts.
scarce, juvs in numerous stages
in grass and low weeds, also in
forest. Ammanis sp. 1 ♀ & 1 juv.
empt from second growth forest
foliage. Crophus sp. in grass
& tall weeds on edge of red fr.
forest. Amulacoma one empt
from foliage in same forest.
Concephalus adts. in same place
as Crophus - Plugis juv. in same
habitat. Light & dark Aluar ephas
shaken from banana and guavano
leaves, juv. amphiacnotid and
large Crochaid shaken from
hanging dead guavano and
banana leaves. juv. Pseudophyllis
all from ditto.

Orth. 94 + 1413 = 1507
Other ins. 53 + 3554 = 3557

Same night. At house.
Moths inside of net. Paroc-
canthus ditto. Beetle in
house.

Orth. $1 + 1507 = 1508$

Other ins. $7 + 3557 = 3564$

1930.78 ~~Sanchez~~ Lancetilla,
Honduras. VIII. 25, 1930. Elev.
100-250 feet. All taken in low
rain forest unless otherwise
indicated.

Blacus americanus 1 ♂ + 4 juvs. beaten
from hanging dead leaves of tree
with small leaves in fruit. Pseudo-
phyllodromia beaten from foliage in
fruit. Supella com in house at meso,
elev. 100 feet. Anaplecta one pale species
in fruit, from hanging dead leaves l.
Anaplecta mex. type ^{from under side of} beaten from
fallen dead tree trunk.
foliage in fruit. Euryctes juvs. running
in dead leaves in fruit flwr. Chromatomyia
♂ from hanging dead leaves in fruit.
Neoblattella detrita sp. ♂ + ? ♀
from ditto. Stagmomantis juvs.

from under foliage in overgrown banana
patch on floor of valley. Juv, walking
stick beaten from low foliage in
forest. Tettigids all from bare
soil spots in sunlight holes or along
trail in forest. Amblytropidia among
mosses in overgrown bananas on
valley floor. Leptomermithys 2 ♀
on low vegetation in forest. Rhachicnaga
2 juv. ditto. Amnicoris 1 juv. ♂
on under foliage in bananas on
valley floor. Asmitia a few, in
forest and in overgrown bananas on
valley floor. Orophus common
in overgrown bananas on valley
floor, few in forest proper, one of
these (taken) being in the uncommon
brown phase. Anaulacomera 1 ♀
only, in forest on low foliage.
Brown pseudophyllid from under
side of leaf of palm in forest.
Concephalus sp. mainly outside
of forest in under and grassy
areas, and in overgrown bananas.

Black masked ~~♂~~ *pyllacid* beaten
from low vegetation in forest.

• *Aster pyllid* picked up from foliage
at forest border. *Cycloptilum*

♂ beaten from forest foliage. Black-
kneed juv. cricket from hanging
dead leaves in forest. 18, 24

Ectonus type *pyllid* beaten from
forest foliage. *Nemobius* sp. beaten
from grass and weeds along trail
through overgrown banana on

• floor of valley. Blackish, pale,
medium-width type, and broad
type. species of *Cyrtus* *Anax yohu* (4)
all beaten from foliage or thicket
from dead leaves in the forest.

Ripipteryx juv. from foliage in forest.
juv. *Euscelus* beaten from forest foliage.

$$\text{Orth. } 98 + 1508 = 1606$$

$$\text{Other ins } 49 + 3564 = 3613$$

Same evening at house Elev. 110 feet.

• *Parocanthus* 4 ♂; ♂ & ♀ *Parachloris*;

♂ *Mollath. detusa* fr. all on screen.

$$\text{Orth. } 7 + 1606 = 1613$$

$$\text{Other ins. } 9 + 3616 = 3625$$

1930.79 Same as 1930.77 but
VIII. 26, 1930. Elev. 75-80 feet.

In trail edge vegetation, among
bananas, in bamboo and heavy vine
tangles. Pseudophy clodromia from
dead banana leaves. Three species of
Neoblattella from same, from
old bamboo sprout sheaths, from
hanging dead leaves of various
character. Chromatodes or Cairnblattes
(?) from dead banana leaves and
sheaths of bamboo sprouts. Amphibius
black species from dead banana
leaves. Hypnoma sp. from dead
bamboo sprout sheaths. Cephalolella
pusillata 1 ad. in short grass.
Amnicus juv. Cepit. albo-nigrum from
snout from foliage. dead banana leaves.
Rhachicnaga 18 beaten from
heavy tangled foliage - not in
fruit. Tropisomerus sp. 1 ♀
snout from low tangle of vines
and weeds at gate of river

place. Conocephalus sp. swept from
 long grass. Juv. brown pseudo-
 phyllids shaken from dead banana
 leaves. Phlugis swept from foliage
 and short grasses. Gryllacris-
 masked species, 1 ♀ swept from
 foliage. Nemobius sp. shaken
 from leaves. Symphylorhynchus ^{varians} _{NH 32}
 swept from under tangles. Auxipha
 2 species, ditto and shaken
 from hanging dead leaves.

Cith. 49 + 1623 = 1672
 Cith. ins. - 59 + 3625 = 3684

1930.80 As 1930.76 - same habitat.
 VIII. 27. 1930.
Anaplecta dark species - one beaten
 from hanging vines. Caribatta nebulosa
 type, one ditto. Supella ♀ in
 mess house. Telmatithis beaten
 from ~~low~~ low weedy spot. Urophyllo
punctata few in grass. Rastista
pellepidus in walk. Rhachicera

juv. ♀ beaten from hanging vines.

Tropidamnus 1 juv. from the

same spot at gate where adult
was taken. Crochus a few
in mds. and tall grass.

Encephalus imm., mainly juv.,
in grass and mds. Anaxipha
pale sp. beaten from hanging
vine + foliage.

$$\text{Lth. } 16 + 1672 = 1688$$

$$\text{Lth. no } 36 + 3684 = 3720$$

Same afternoon. Similar habitat.

Black Anaplecta beaten from hanging
dead banana leaves. Pseudophyllo-
demia from ditto + juarum

leaves. Noth. rubra group, N.
ditron group + other Noth. all
from banana leaves + juarum

leaves. Pseudomiopteryx
♀ from dead banana leaves.

Alphulella punctata in rank

grass & weeds. Rhachicnagra

Juv. ♂ beaten from foliage.

Amicrus ♀ ditto. Clavilia

few adults, numerous quite immature
genera. ? ? Brumma juv. ♀

beaten from tall rank grass &
weeds. Anaulacomera ♂ beaten

from foliage. Juv. brown pseudo-
phyllid from dead banana

leaves. ♀ Archard cricket

ditto. Anaxipha dark species
and pale species, ditto.

Orth. 27 + 1688 = 1715

Other ins. 49 + 3720 = 3769

1930. 81 Same as 1930. 80 but
VIII. 28. 1930.

Anaplecta dark sp. from hanging
dead banana leaves. Pseudophyllo-

dromia ditto & from foliage. Carillat
man rebulicola from dead leaves.

Neblatt. wahua type & ditusa-
type, also smaller species of all

from dead banana and guavava
leaves. Juv. Eurycotis - dead
banana leaves. Amblytropidia ♀ -
very few in grass - used along
narrow trail in abandoned
banana patches. Comilia scarce
as adults, numerous in all immat.
instars - found as usual. Rhacili-
creagra 1 ♂ swept from upper
surface of shrub foliage. Crochus
numerous in grassy and weedy
spots. Phlegis few on weed & tree
foliage. Insura 1 juv. beaten
from dead banana leaves.

Conocaphalus several in weeds
& grasses, mostly juv. Hapithus
1 ♂, 1 ♀ beaten separately
from dead banana leaves.
Cyrtopithecus 2 ♀, ditto.

Orth. 31 + 1715 = 1746
Other ins. 76 + 3769 = 3845

1930.82 Same as 1930.81. but
VIII. 29. 1930.

● Cariblatta of robust. type and ♀♀
of 3 sps. of Problattella all shaken
from hanging dead banana leaves.
Epit. alb.-nigrum 1 ♂ 1 ♀ ditto.

Bacteria large ♀ in ~~long forest~~
thicket along stream. 80 feet (C.B.W.)
Oeph. punctata abundant in short
grass along trails. Ambl. sp.

1 ♀, 1 ♂ seen only, in woods and

● tangles near trails. Telmatettix
♂ ♀ along trail, sweeping low
can. Large brownish pseudophyllid
♀, shaken from hanging dead
banana leaves. Nemobius 1 ♂
swept from under grasses. Pale
Anaxepha and Symphyla exilis
ditto. Hapithus 1 ♀ from dead
banana leaves.

Orth. 46 + 1746 = 1792

Other ins. 50 + 3840 = 3890

1930.83 Same as 1930.78 elev.
100 - 400 feet, VIII.30.1930. This
area of forest, more largely
palms than the adjacent area
worked as 1930.78.

Neoblattella nahua type. All taken
from hanging dead leaves, chiefly
palm. N. diversa sp. ditto.

N. other sp. 1 ♂ ditto. Caribatta near
reticulata numerous ditto, also
swept from foliage and sev. from
hanging dead banana leaves at
foot of slope. Nyctelia large sp 1 ♂
from base of dead palm frond.

Epit. afrika type, 1 ♂ beaten from
dead palm leaf. Stenomantis
sp. 1 juv. from foliage in forest. Chorodis
sp. 1 ♂ taken in early morning
on wire net at mess hall (Mr. Hatch).
Walking stick with spinose only.
pl. (♂) beaten from hanging
dead bribs and leaves matted together.
juv. walking sticks taken from

dead palm leaves or swept from
foliage. Plectrocnemia adults
• juv. swept from dead leaves
in forest floor. Anthropodina 1 ♀
from under at low edge of forest.
Machanocera 1 ♀ from bare rock
along Sanutilla River (also about 50
ft), juv. from bare ground at
forest edge. Cemilia num. in
forest. Leptomurinthopora 1 ♀
from foliage. Crochus numerous
• particularly at the edge of the
forest & before reaching edge of same.
Wings dark glabrous cricket, 2 ad.
♂ and immat. individuals. Spotted
lyon. Cricket ♂ swept from
foliage in heavy forest.
Crochus sp. ♀ swept from foliage. Hygrocnemia (?)
sp. from forest floor in dead
leaves and from low forest
foliage. Six species of Anaxipha

(one green) all script from
forest foliage.

Orth. 73 + 1792 = 1865

Other ins. 36 + 3895 = 3931

1930. 84 Laumbilla, Honduras.
Elev. 80 feet. VIII. 31. 1930. In
house in day time. Ep. l. albe-
nigrum. B. Prieto on screen
of house in early morning. Crochus
on path in evening

Orth. - 3 + 1865 = 1868

Other ins - 2 + 3931 = 3933

1930. 85. Same as 1930. 83 but
up to 600 feet. Fern palms
abn 400 feet. IX. 1. 1930.

Moll. valina type script from ^{curry's}
foliage and from dead leaves ^{ins. from}
Caril. reticulata type | ditto. Anaplex ^{dead leaves}
mex. type foliage. Pseudophyll. ^{no ground}
sp. foliage. Strg. sp. ins. from
foliage. Large B. Bostra script
from foliage. Juv. phaeuina

beaten from dead palm leaves.

♀ Pseudomopteryx ditto.

Anthyropus 1♂ from muddy veg.
at edge of forest. Aspilota in
sunlight holes in forest and in
banana scrub. Plectiscus
sweep from leaf stems ground
in dense shade of forest. Arani-
cus juv. swept from foliage at
edge of forest. Machrocera juv.
on bare stems along Lausilla
Rim - no adults seen. juv.

Rhinoderma beaten from
low canopy forest. 1♂ large dark
glabrous cricket from ground
can. ♀♀ (?) + juv. of same, ditto.

Speckled winged cricket 1♂
3 ♀♀ (juv.) ditto. Plotted
black leg. cricket 1♂, ditto.

Bicolored Urochanna type
from bamboo stalk in bamboo
grove. Hygroplitis from

ground corn - chiefly dead
leaves. Fin species of Anaxipha
all from ground corn or low
foliage in forest. Pale yellow
juv. cricket from forest foliage.
Anaulacocera sp. from foliage.
Juv. green pseudophyllid
from hanging dead leaves.

Orth. $112 + 1868 = 1980$
Other ins. $57 + 3933 = 3990$

1930.86 Ranuitilla, Honduras.
Sept. 18. 2. 1930. Picking &
sweeping along trails through
valley floor that grass & weeds,
overgrown banana patches and
second growth scrub.

Phalictus ^{25.1♀} from hanging dead
banana leaves. Juv. dark.

Anaplecta ditto. Chorisoneura

sp. 1 from hanging dead
guarano leaves. Pseudophyll.
1 from foliage of tree.

Neoblattella 1 ♀ from hanging
dead banana leaves. Paratettix
from damp spot in trail.

Alphulilla punctata in weeds &
grass, numerous. Amblytropidia

sp. uncommon & local in low

conv. Machaeocera 1 ♂ from

sandy spot in trail. 1 juv. also.

Aidemona 1 juv. in short grass.

1 juv. Rhachiceraagra swept

from shrubbery. Crochus

locally numerous in low

conv. Encephalus abd. in

same. Ripipteryx a few in

low spots - all very small.

Anoxipha pale species from
shrubby foliage and in dead
banana leaves.

Orth. $40 + 1980 = 2020$

Other ins. $69 + 3990 = 4059$

1930.87 as 1930.83 but ~~up~~
~~to~~ 700 feet. C. B. Worth.
IX. 2. 1930.

Orth. 2020

Orth. in. $2 + 4059 = 4061$

1930.88 Lausitilla, Honduras.

IX. 3. 1930. Eastern border
forest along pipe line trail to
reservoir. Elev. 100-250 feet.

Pseudophyllodromia swept from
foliage of low corn in forest

Neott. nahuia group ditto. Chorismene
broad, hyaline margined species.

1♂, ditto. Juv. mantid, ditto.

Juv. phasmids, representing at least
two species, ditto. Plectonotus

swept from dead leaves and
bare spots of forest floor.

Amthys sp. ♂ & small series, 1♂ + 1♀ in
corte, taken in low woods along
trail through mangrove swamp
near forest edge. Machaeris

2 sp. 2♂, 1♀ on bare stones along

course of Llanocilla River, all
seen taken. Heliastur sp., same

comments as for Machanera,
taken together. Uranilia sparingly
in forest and through mangrove
savanna, in low bush, vigorous
juniper, also flying. Leptomeria
prova sp., 1♂, 3♀♀ locally in forest,
preferably on underside of broad
leaves of low vine, very vigorous
juniper, dense. Rhachicera sp.

1 juv. in sunlight hole of forest
on exposed foliage. Microtylo-
pteryx sp. 1♂, 1 juv. in foliage
(lower) in sunlight hole just
below reservoir. Chromacris 1
tattered ♀ on foliage on slope
of small gulch in forest.

Orophus more numerous about
forest edge. juv. Neomorph.
in tall weeds along trail
through mangrove savanna.
Mottled leg. catenoid type

1♂ & juv. ♀ swept from live
ground corn and from dead
leaves. Anaxipha, prob. 3 species,
all from foliage of corn up to
4 feet high. Other gryllids all
from Hippomelania 2♂, 1♀, all
swept from dead leaves and
very low corn on ground
low corn.

Orth. 69 + 2020 = 2089
Other ins. 34 + 4061 = 4095

1930.89 As 1930.85 but up to
700 feet. IX - 4. 1930.

Sweeping dead leaves and very
low corn on floor of forest floor,
beating palm leaves and leaves
of other next stage of high of
undergrowth, vines on trees and
hanging dead leaves.

Pseudophyll. swept from foliage.
Holl. nabua type from
palm leaves, hanging dead
leaves & rarely low corn.

Both. detritus type swept from
higher foliage. Utter sp. of Both.
ditto. Carillatta rubicunda
type, from higher foliage and
from ground cover, both dead leaves
on ground & low cover. Juv. Euryctes
swept from ground. Anaplecta
sp. swept from foliage. Chorismenus
an addit. species with dark
mantle, from foliage. Short-winged
Stagmomantis ad. ♀♀ & juvs.,

all swept from undergrowth
foliage. Juv. walking stick
from vine stems. Plectonotus
ad. : juvs. swept from forest
floor, in dead ^{200-300 feet} leaves. Platypterus
sp. 1♀ from ditto, at 500 feet.

Cumastax sp. 3♀ at 700 feet in
thick stand of low, glabrous and
water leaved plant. No other seen
after extensive search.

Amelhytrop - 1♀ in undergrowth
trail at edge of forest. 80 feet.

Machacera sp. 1♀ in weeds at
edge of bare stone area along Rio
Rancharilla, 75 feet. Ophthalmus-
lampis sp 1♀ in low ground
corn plants at 200 feet. Extensive
search revealed no others - this
one sluggish, jumped but little.
Chromacris sp. 1♀ at 650 feet
on foliage of tall undergrowth
Leptomeria theophrasti sp. 1♀ at same
pt. as Chromacris. ?? Prionacris
? juv. from vines growing on trunk
of tall tree. Microstylum
B. in low ground corn at 600 feet.
Anaulacomera sp., 1♀, swept from
foliage. Glabrous tegm. gyllid
1♂ at 300 feet in ground
corn. Short-winged (lat.), thinning
juv., numerous, all juvs?
at 300-600 feet, in ground
corn. B. colored tegm. gyllid
leaf, 300-600 feet, swept from
foliage chiefly, but also in ground

corn. Myzomachus a few
ads. from dead leaves and fr.
corn vegetation Anaxipha,
at least 3 species, from ground
corn and foliage of corn
undergrowth. Cyclopilius 1 ♀
from ground corn.

Orth. 89 + 2089 = 2178
Other vis. 50 - 4095 = 4125

1930.90 Same as 1930.88 but
IX. 5. 1930.

Lupella 3 ♂♂ in mess hall in
Am. Anaplecta mex. type one
from shrub foliage in forest.
Pseudophyll. ditto. Chorismena
very pale sp. 1 ♀ from ditto. Small
specimens of Stagmomantis 1 ♂ &
3 juvs. from shrub foliage on
foliage of low ground corn.
♂ walking stick with stylate
subg. spurs. from low ground
corn foliage. ♀ with lobate

median femora swept from
thrilling foliage, near together
Juv. ditto. Plectropterus from
bare ground and low corn near
trail. Platytettix 1 ♀ from moss-
covered boulder alongside of trail.
Tetratettix 1 ♂ from bare trail.
Ameltyropus 2 ♂ from weeds along
trail in overgrown bananae near
forest edge. Leptomerinthopoma
local and not common in low
corn, jumping very actively &
vigorously. Chalcidocnema similarly
local but on the tops of medium
shrubby and on stems of same,
not as actively jumping as Lepto.
Microtylopsys 1 ♀ from upper
surface of ^{low} shrub foliage, no
others seen. These three genera
altho occurring in the same
general type of conditions have
somewhat different ecological
niches. Repts. keeps low
down, either on the upper or

under side of the large type
of leaves etc. prefers and jumps
with great rapidity and for
a long distance. ^{is a great dodger.} Rhach.

hops in taller shrubbery on
the tops of the leaves or on
the upper stalks of or stems
of the plant. It is much ^{less} sluggish
and jumps with a far greater
effort. Micro. hops to the upper
surface of the leaves of the
shrubs of medium height
it likes, jumping far and
with little effort. Crochus
~~falls~~ but few in forest, some
brown phase, common outside
forest. Canacophalus common along
trail in megam. Canavus outside
of forest. Immat. from pseudophyllid
except brown low one in forest
but near its border. Minutia
1 juv. from megam. common
fringe just within forest.

Agromyza all swept from
low ground cover foliage and
from dead leaves on ground.

Anasipha, at least 3 species,
from ground cover foliage and
foliage of medium height shrubby
yellowish & brown gr. pyllid.
from medium height shrubby
f. i. e. s. s. etc. and dark brown
prothoracic hoppers on dead
leaves on ground. *Juv. Mithras*
swept from low foliage.

$$\text{Orth. } 80 + 21, 8 = 2258$$

$$\text{Orth. ins. } 59 + 4125 = 4164$$

1930.91 As 1930.89. Same elev.
but IX.6.1930.

Anaplecta pale sp. from
ground cover. *Anap.* mex. type
ditto. *Pseudophyll.* from
foliage. *Orth.* *rubra* type
from hanging dead leaves.
Orth. *rub.* type from foliage.
Supella from table in mess

hall. Chorismeneura add. sp.
with white pencilling, swept
from foliage of forest under-
growth. Juv. Phasmoda
beaten from foliage. Platynotus
taken from bare ground & low
can of forest floor. Telmia-
tettix one male from lower trail
100 feet. Amurostax ♂, ♀
from same spot as taken 1930.
♂, no other seen. Hepto-

meria thoprona sp. a few 450-700
feet, 2 ♀ taken? Rhachinagrus
1 ♀ taken from foliage at 600
feet. Juv. ? Amicrus 2 swept
from low can at 500-600 feet.
Orophus - ~~from~~ specimens from
trail at 75 feet through Myrica
humilis, brown from
forest at 250 feet. Acantho-
myia from foliage at 250
feet. At least 3 species of

Anaxipha from low ground
corn and higher foliage
150-200 feet. Hygrocnemobius
from low ground corn foliage
& dead leaves on ground,
same elevations. Striped
glabrous cricket, dead leaves
& low ground corn foliage
200-300 feet. Bicolored legu-
my leaf ditto. Large Amphispiza
sp. from tree trunk at 600
feet. Large & crochard
snout from foliage of fair-
sized mangrove.

Crab. $104 + 2258 = 2362$
Other ins. $47 + 464 = 511$

1930.92 Same as 1930.86 but
IX.7.1930.

Neohatt detrusa type from
hanging dead banana leaves.
Carib near rebuticula me ditto.

Juv. ♀ Anaplecta ditto. 2 juv.

Brummaria (?) script from
shoulder high foliage. Para-
tettix from ground of trail. Amly-
2 ♂ from low foliage along trail.

♂ & ♀ Amnicus from vine covered
wood tangles - no other

seen. Juv. Leptocampa from
same ex. habitat as other prev.
taken - exten. search revealed

no more. Conocoph. generally
dist. in low weeds, along trails.

Phlegis 2 in tree foliage.

Viadana juv. same habitat
as Amnicus. All pyllid
from shrubby & tree foliage.

Orth. 27 + 2362 = 2389

Other inv. 60 + 4211 = 4271

1930.93 As 1930.89 but 800-
12 feet & IX. 7. 1930 & C. B. Worth
coll.

Orth. 8 + 2389 = 2397

Other inv. 31 + 4271 = 4302

1930, 94 As 1930. 89 but 1X.
8. 1930.

Anaplecta mex. type sweeping
from low ground cover. Anaplecta
pale type, same. Choris meura
pale sp. resting on upper surface
of low ground foliage (6-8" from
ground). Pseudophyll. on
higher foliage, as usual. Carib.
rebel. type swept from low
surface cover. Juv. Pseudonioptra
sweeping on low foliage, Juv.
phasmids swept from foliage.
Platromerus numerous on
dead leaves and low cover of
forest floor. Andlytrop. 1♂
in weeds in abandoned banana
before reaching forest. Emmact.
1♀ in same habitat as
primarily - all seen after
careful search. Romalis
Chrysomel.
1♂ at 600 feet, from foliage
shoulder high. Leptomerinthopron

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4♂, 3♀, from foliage 1-4' high, at elev. 400-700 feet, very active as usual. Rhachicera 1♀ head high foliage at 600 feet. Winged Rhicurderma swept from primed cane at 300 feet - possibly fallen from vines? Crochus none seen in forest - common along trail through overgrown bananas. Dofet Gryllacris pink species swept from shoulder high foliage at 600 feet. Juv. from pseudophyll. swept from low foliage. flabrum short-winged fly, lid 1♀ swept from low primed cane. Bicornis ectocoid and lunate ditto same habitat. small nematoid sp. ditto. Myrmica ditto. Acrida about 4 species from foliage of ground ~~cane~~ cane and of undergrowth as high as

variet.

Birth, 91 + 2397 = 2488

Withersins, 33 + 4302 = 4335

1930.95 Same as 1930.88 but.

IX. 9. 1930.

Epil. ald. ^{referred one in} climax americanus 18, 19, ^{in am. other} ^{in dead banana} ^{hanging} ^{leaves}

from ^{hanging} dead leaves (small). Cair.
reticulata type swept from low

ground cover. Mitt. sm. species
from foliage ^{in banana}. Mitt. valina from
hanging dead banana leaves
in overgrown abandoned bananas.

Pseudophyll. swept from foliage.

Bagm. juv. from forest foliage.

Juv. phacelid. from ditto.

Plectroctes from forest floor,
dead leaves & humus - Anthro.

♀ from foliage along trail

in overgrown abandoned bananas.

Osmilia generally det. as

usual. Phaciscreagra localized

and in fair numbers in one
area of tall windy vegetation
(6-8 feet) resting on the
upper surfaces of the broad leaves
and the upper main stem
of the plant. Microlyctes
but one seen ^{on foliage} on low foliage
near Rhachicreagra area.
Leptomeria thopora etc. on
low foliage. Chromares 1 on Leptomeria
Chauliophora etc.

Shoulder high foliage. Crotophaga
 all collected from weeds in
 abandoned bananae. juv. pseudoph.
 resting on dead leaves. Procer-
cephalus 1 from grass through
 abandoned bananae. Anas carolinensis
 1 ♀ from low foliage in fruit.
Ceryle numerous in grass
 & weeds through bananae.

Large ♀ procutaneous fly larva
resting on dead banana leaf
along trail. Wenatchee 1 ♀

in mess hall in Am (introduced?)

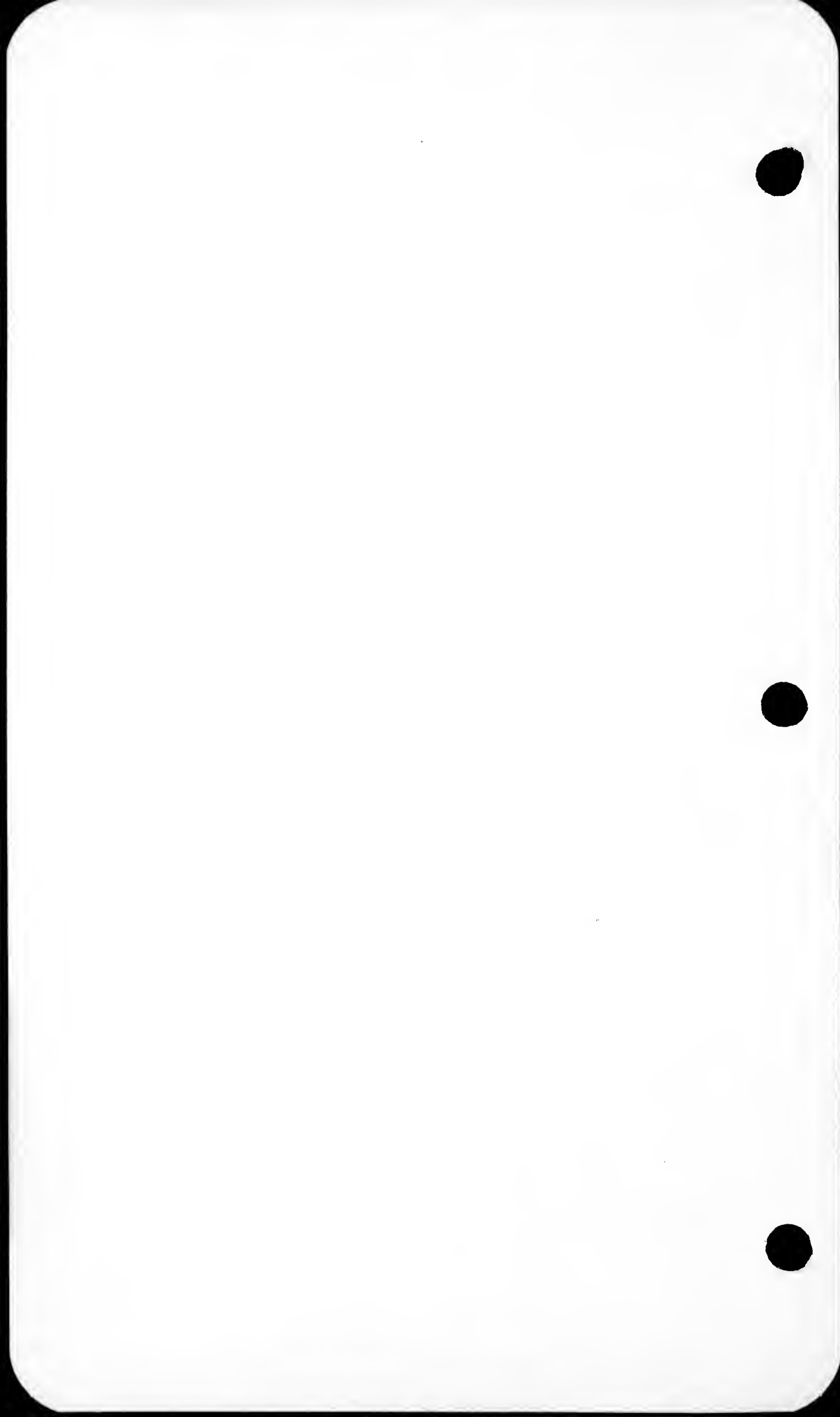
Araxipha three species
from low and surface corn
foliage in forest.

With $58 + 2488 = 2546$

Other in $43 + 4335 = 4378$

Matto Grosso

1931



1931.1. Hescalvados, Mato Grosso.

Brazil. Rio Paraguay. (V.R.) ^{Elev. 500 feet}
June 23, 1931. ~~Trope~~ Diedronotus

laevis Type on bush about 2 feet
high in dry scrub. Encoptera on ground
under heavy low scrub.

Orth. 2 = 2

Other insects without notes approx. 15 = 15

1931.2. Hescalvados. June 26, 1931.

Amurexcha in dusty road. Sphingid
moth in room at night.

Orth 1 + 2 = 3

Other insects 1 + 15 = 16

1931.3 Hescalvados. June 27, 1931.

Paractagmatoptera brought to
me by boy.

Orth 1 + 3 = 4

Other ins. 16.

1931.4 Hescalvados. June 28, 1931.

utterly in rim border forest
comm. fly from Crax. Beetle
attracted to light

Orth = 4

Others 16 + 3 = 19

1931.5 Hescalvados, M.G., Brazil.

Prior to June 1st in 1931 between
April 1 - June 1, 1931. Serge.

Orth 0-4

Other ins. 31 + 14 = 45

1931. 6. Descalvados, M. G., Brazil

VI. 9. 1931. P.H. afternoon

work along road to westward for
about a mile. Beating, sweeping
& picking in muddy scrub along road.
Tragacis com on borders of road,
about drying ponds and edge of
true scrub.

Juv. *Urochloa* mated swept from low
com.

Macysites 1 juv. swept from dunes

Paratellus 2 ad & 2 juv. from damp

ground about border of drying depression.

Oryzophila punctata numerous

in wet open ground (if only) phase

in wet grass & low scrub.

Urochloa 4 - mostly in dry, dusty

sandy road. *Paratellus* 1 ad. 1 juv.

at rest. *Stenopoda* juv. of var.

in habitat with *Oryzophila*,

local only. *Leptocoma* 1 only, all seen,

from 1 of spawning note, about

2 feet from ground. *Wiedemannia*

1 of only, in dry open sun. *Paratellus*

capensis numerous in wet com.

action, in pair on edge when

there. *Urochloa* along

edges of drying pond in wet
spot.

seen. $42 + 4 = 46$

seen also $50 + 23 = 73$

1931.7. Hescalandros, M.G., Brazil.

VI. 1. 1931. Periplaneta in my room. Moth - little at light

$$\text{Orth. } 1 + 46 = 47$$

$$\text{Other ins. } 2 + 83 = 85$$

1931.8 Hescalandros, M.G., Brazil.

VI. 2. 1931. Beetles at light at night

$$\text{Orth. } = 47$$

$$\text{Other ins. } 2 + 85 = 87$$

1931.9 Hescalandros, M.G., Brazil.

VI. 3. 1931. Hedronotus on ring of bush 2 feet high in campo.

No effort to escape. Amurogryllus in house at night.

$$\text{Orth. } 2 + 47 = 49$$

$$\text{Other ins. } 87 + 1 = 88$$

1931.10 Hescalandros, M.G., Brazil.

VI. 4. 1931. From native children.

Parastagmatoptera, Paradechoplas

a Hedronotus.

$$\text{Orth. } 3 + 49 = 52$$

$$\text{Other ins. } = 88$$

1931.11 Same as 1931.10 but

VII. 5. 1931. In house. Syntrechus.

$$\text{Orth. } 1 + 52 = 53$$

$$\text{Other ins. } 88$$

1931. Rio Huerfano, M. G., Brazil.

July 8 1931. M. Beating & trapping in old fields and small pastures along road, s. along Rio Paraguay for a few hundred yards. Cover mostly weeds and dried up weed stems.

2 *Chrysomela* beaten from low corn, not more than feet high.

2 juv. Blatid beaten from leaf foliage for tree on edge of thicket.

Uaniotopsis 1 ♂, 1 ♀ beaten some distance apart from weedy corn. Upper juv. much resembling auto common in same corn.

Uaniotops juv. beaten from similar low weedy corn.

Uphullicia punctata red, red-tarsus and common.

Parosca *vincenti* a single ♀ in many weed corn.

Dicranotus *cooperi* then in "ear" numbers on ground and very low corn in weedy areas. Only some from seen.

Paradidymopanax numerous on ground
in weedy areas, more broadly
distributed than *Dicranotus*, some
in coitus. ^{juv. *unus* + *Stenopota* also found} *Iss. latic.* + *fy ll.* all
beaten in same weedy areas.

Unth. $37 + 53 = 90$

Other ins. $66 + 88 = 154$

1931.13 *Escalados, M.G., Brazil.*

VII.8 1931. Indian children
collected *Pseudophyllid*.

Unth $1 + 90 = 91$

1931.14 *Escalados, M.G.,*

Brazil. VII.8. 1931. small

mantis running in sandy road.

Adult *Stenopota* on cane stem
of corn used near Indian village.

blodged about ring in usual fashion
of longit. prickers. Not active.

Unth. $2 + 91 = 93$

Other ins. 104

1931.15 *Escalados, M.G.,*

Brazil. Water? Coll. by large

+ *epidoptera*. 3 beetles.

Unth. $= 93$

Other ins. $7 + 154 = 161$

1931. 16 Klescalados, M. G. Brazil.
VII. 10. 1931. J.R. Sulphur from native
veg; thipper in house at night;
other in day time.

leth. 93

Other ins. $161 + 3 = 164$

1931. 17. Same loc. + date as
931. 16.

Xylocopa & mths. latter at night.
Monolopha 3 - Indian children.

leth. $3 + 93 = 96$

Other ins. $3 + 164 = 167$

1931. 18 Santa Rosa, Klescalados
M. G. Brazil. VII. 13. 1931.
in grassy area of campo, nearly
razed in part, small areas of scrub
but a portion of an acre with a few
trees and thick scrub, generally a
savanna with a so. *Leptopoda* almost
entirely common.

Scythris 1 ♂, 1 ♀ (adult) all seen.
Scythris 2 sp. in water feeding
intensely and all others
smaller. *Pachyneurina* 1 ♂, a
pair also seen but so rapid on
ground surface many grasses.

Tetrahynus

Call Miss Zahn.

~~Wm. W. W. W. W. W.~~

Blaw chuk.

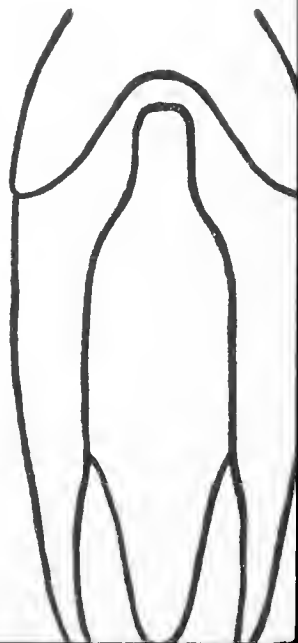
Ch. W. W. - type

f. T. W. W. is A

1931.20

W. W. W. is

1931.25



view of aedeagus of *Trox tylos*.

covered with a yellowish-brown granule-
g. Interspersed over the body are
e hairs, which are a little more con-
tubercles. The underparts of the
the tibiae are reddish and shining.
other strongly reflexed laterally. On
line and just to the rear of the genae
cavated pit. Head rounded without

Phaenella punctata no adult, 1 taken,
the ground & low cover.

Macropus 18 kept.

$$\text{with. } 14 + 96 = 110$$

$$\text{Other ins. } 6 + 167 = 173$$

1931. 19. Santa Rosa, Rescalados area,
Matto Grosso, Brazil. VII. 14, 1931.

Vilma 1♀ on ground in area of
heavy forest - just outside of camp.

Kanabika in swimming hole at Santa
Rosa.

$$\text{Cuto. } 1 + 110 = 111$$

$$\text{Other ins. } 1 + 173 = 174$$

1931. 20. Santa Rosa, Rescalados
area, Matto Grosso, Brazil. VII. 16, 1931.

In dry palm forest, with many strangling
figs and undergrowth of low cactus,
a ground, also the roughed with
narrow, serrate margined leaves.

Search done, sweeping over small
dry leaves on wet floor and indis-
cussal picking. Many trees already
leafless, due in course of losing

them. One tree in more open parts
strongly resembles gumbo - limbs
with curling, peeling papery bark.

Feltig is all in first floor *Conusia*
few small birds and lighted
in palm trunk in each case.
Palm in this nest mainly carozo
or a near relative. *Cephalogaster*
jumping in low corner of first floor,
the in taken all alone. *Emptera*
in air numbers in first floor in
dead leaves - one hid in a curled
leaf. Other immature fly like
same habits. *Leptyma* on grass
kept in open camp. *Scaptomyza*
at light coming of July 15.

$$\text{Arth. } 11 + 111 = 122$$

$$\text{Other ins. } 1 + 124 = 125$$

1931. 21. Descalvados, M.G., Brazil.
July 13-18, 1931. Mrs. F.G. Crosby.

$$\text{Arth. } 122$$

$$\text{Other ins } 6 + 175 = 181$$

1931. 22. Descalvados, M.G., Brazil.
July 19, 1931. J.H.

Birds at light

$$\text{Arth. } 122$$

$$\text{Other ins } 1 + 181 = 182$$

1931. 23. Santa Rosa, Wescaloado
Regim, M.G., Brazil. July 16,
1931. M.

Graminacea swept + from grass.

Orth. E. 1 + 122 = 123

Orth. in. 1 + 182 = 183

1931. 24 Carne de Vaca, 8 m. S. of Santa
Rosa, Matto Grosso, Brazil. July 28, 1931.

In pantanal grass on damp or wet ground.
Leptocampa in green, brown & rusty.

from places on pantanal grass.

Orthocentrus in same situation.

Orth. 48 + 123 = 171

Orth. in. 50 + 183 = 233

Cur.

1931. 25 Santa Rosa, Wescaloado
Regim, Matto Grosso, Brazil. July
31, 1931. In tall grass campo,
some grazed and in open dry forest,
with tree cactus, acacia, a few palms
and much spiny and woody undergrowth.

Female Acontodespis - juv. swept

from vegetation in dry forest.

Juv. Blattellid ditto. - all seen

Juv. Curculionid ditto - all seen.

Two copids in muddy stems of
dry root I identified - perisperm
each revealed only the two
occluded. *Cratichneumon*

occurred. *Urotychopoidia* numerous
dull - red. in camps & edge of
very moist, but particularly common.

Centropages (?) juv. in dry nest
on road. *Paratropus* in dry
nest in sand. *Urosalpinx* com.

Upland(?) in same camp
marked. Upland(?) one only

in the forest. Calluna etc. &
in grassy canopy, etc.

in meadow. *Leptoglossa* (2 sp.?) abundant
in tall grass of grassy camp,
not at all wary and easily
caught with hand - always!

Taking usual position of
 elongate, pass-bearing lines.

Leucurus & others all seen -
habitat as Lepturus.

Urdmutter 1. I. in ground

in dry scrub of forest. *Hyperophus*
in grass of campo - all seen.

Phylloptera (?) in green
leaves of woody shrubs in dry
forest. *Agallia* *Paradictynophus*
seen. eaten grass on ground in
campo. *ms.*
Urochrochus in
forest scrub.

Orthopt. 86 + 171 = 257

Orth. ins. 20 + 241 = 261

1931. 26. Campo de Ucuca.

Same loc. as 1931. 24.

ms. Hormetica running on
ground in palm thatched shelter.

Orth. 1 + 257 = 258

Orth. ins. = 261

1931. 27. Camp 20 m. S. of Santa Rosa.
Aug. 13, 1931. J. A. R.

In tall pantanal grass and
dry campo. *♀ Urochrochus*
at light V. 14. 12. *♀ grass. Orth. ocellus*

beaten from tall campo grass.
Alphitonia few in same. *Leptocryptus*
 in fair numbers in tall pantanal
 grass - dry campo grass, but
 particularly common. ♀. Large
 walking stick swept from
 dry pantanal grass. Dog + *Leptocryptus*
Leptocryptus in dry campo
 grass, adults apparently low down,
 all swept. *Tettigidea* appar. from
 ground with. *Leptocryptus* 30 + 258 = 288
 other ins. 76 + 261 = 337

Only 1 ♂ only
 all in campo grass

1951. 28 Same as 1951. 27, same
 date not attracted to light at
 night.

1 *Neoblattella*
 1 *Scapheris* on ground
 1 *Minobius*
 1 *Rumicaria* flew in to lamp.

1 *Scapheris* on
 fly 11.11.54.

with 4 + 288 = 292
 other ins. 31 + 337 = 368

1931. 29. Same loc. & conditions as
1931. 27 but VIII. 14 1931.

Orthocentrus 1 ad. ♂ + 1 juv. in
pantanal grass of drier (more campo)
character. Brunneria 1 ad. ♂ + 1 juv.
in pantanal grass about 300 feet
high. Agonostoma 1 ♀ in shorter campo
grass. One Imatodictyon ditto.
Leptogobius in fair numbers in pantanal
& taller campo grass, ads. + juvs.

Cyprinodon 1 ♀ in campo grass. Mo-
crocephalus sp. 1 ♂ in pantanal
grass. Cephalorocoma 5 imp. from
Orth. 23 + 292 = 315 dry campo grass.
Other ins. 10 + 368 = 384

1931. 29 same as 1931. 28 but
VIII. 1 - 10. 1931. at 100 ft.

Tetrastichus 1 ♂, 1 Euphorbia 1 ♂,
1 Agave 1 ♂, 1 Agave 1 ♂

1 ♂ of Tridactylus

Orth. 14 + 315 = 329

Other ins. 35 + 384 = 419

1931.30. Rescatados, M.G., Brazil.
Aug. 23, 1931. In dry scrub forest &
open area. exceedingly dry &

largely leafless forest of *Salicoides*.
Proctolophus one ♀ in ground in
patch of green brush. *Hemionotus*
w. ♀ in dry low scrub, on
ground. *Parabellus* - like walking
stick beetles from dry forest
area. *Protopha*, ad. ♀ juv. on tree
ground - active, local, not fed
seen. *Paradichropterus* 1 juv. only
on ground. juv. crickets eaten
from vegetation.

$$\text{Orths } 10 + 329 = 339$$

$$\text{Other ins. } 134 + 419 = 553$$

1931.31 Rescatados, 18-9. 1931.
At light at night.

Parabellus 1 on screen.

Gryllodes 1 on step.

$$\text{Orths. } 2 + 339 = 341$$

$$\text{Other ins. } 8 + 553 = 561$$

1931. 32. Rescalvados, M. G., Brazil.

IX. 27. 1931. in dry scrub to west of
settlement.

Fit Mulla : beaten from tree
fringe.

Microtus in dry sandy soil all
over.

Onychomys same.

Paradichrysurus on ground in
most places - all seen taken.

Urophilus juv. in same.

Urophilus all except from end scrub.

Orth. 12 + 341 = 353

Orth. ins. 25 + 561 = 586

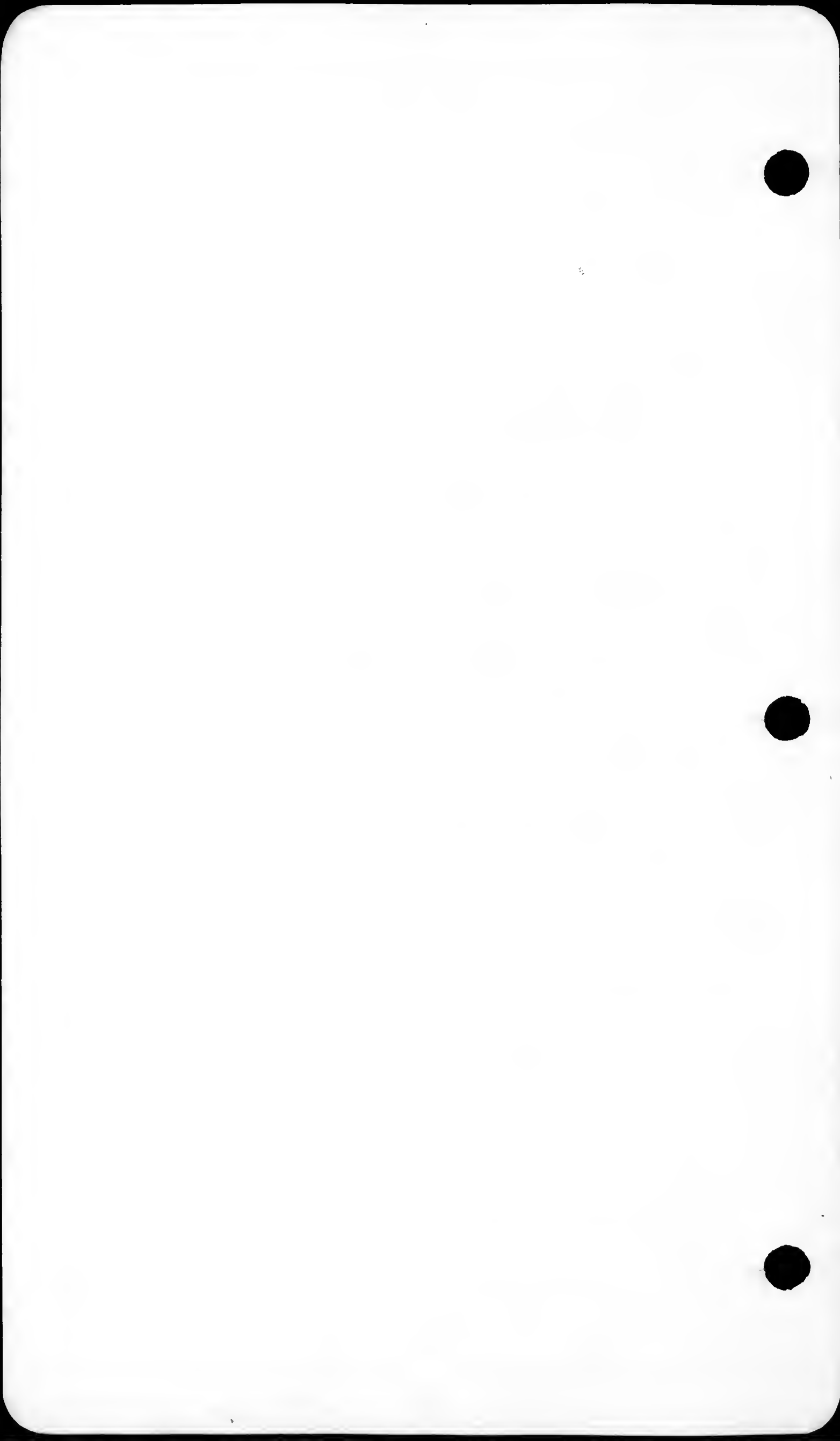
1931. 33. Rescalvados, M. G., Brazil.

IX. 29. 1931. Attracted to light
at night.

Paulinia, Nemobius, Pachylus
unimaculatus. Tridactylus + Tenebrio.

Orth. 20 + 353 = 373

Orth. ins. 38 + 586 = 624



Africa

1934

1934 Africa.

1934.

Molokini,

#1. Maji ya Moto, betw. Rongai and Lake Hannington, Kenya. Elev.

June 16, 1934. At light at night.

Orth. 1 - 1

Elev. (ann.) 3250 feet.

Other insects 21

Pseudo deropeltis running on ground.

Locality arroyo in lava with hot springs. Surface soil red.

near mouth of Molokini River
1934. 2. So. End of Lake Baringo,
Kenya. Elev. less than 1000 feet.
2600 ft (chart) Prob. about 3000 feet.

June 17, 1934. Arid volcanic

soil with low acacia, patches of short grass and scattered, park-like higher acacia and other trees. Very little evident insect life.

Fry Clotalpa bought from old Nyemi, who intended to use them for fish bait. Also had dragon-fly nymphs.

Aerotylus numerous, vary.

Sphingonotus few, very vary.

2 species of dragon fly - one reared.

Orth. 15 + 1 = 16

Other ins. 8 + 21 = 29

1934.3 Same as 1934.1

June 18, 1934. Day time.

$$\text{Arth. } 0 + 16 = 16$$

$$\text{Arthropods inc. } 4 + 29 = 33$$

1934.4 Same as 1934.1 but
June 18, 1934 at night at
night.

1 Tarachodes + 1 immat. Cledip.

$$\text{Arth. } 2 + 16 = 18$$

$$\text{Arthropods inc. } 337 + 33 = 370$$

1934.5 Same as 1934.1 but

June 19, 1934. On surface
of old lake beds and remnants
of old lava flows covered
in most places by lake
beds.

Butte ex Hyem
Cledipoda common. native.

fastidiosa only one seen.

Chrotogonus ♀♀ particularly
in evidence on rougher
terrain ♂♂ fewer and
far more wary. ♀♀ heavy
and but quick in turning
about.

Taranta? few and very
active. On bare lava
sections.

$$\text{Orth. } 39 + 18 = 57$$

$$\text{Other insects } 2 + 370 = 372$$

1934. 6. Same as 1934. 2 but
June 19, 1934.

All at night attracted to
light.

Tarachodes - falconus

$$\text{Orth } 3 + 57 = 60$$

$$\text{Other ins. } 134 + 372 = 506$$

1934. 7 Same as 1934. 2 but;
June 20, 1934

1 ~~Thericles~~ hopped on table
at lunch. Caudal fem. rich

$$\text{Orth } 1 + 60 = 61$$

$$\text{Other ins. } = 506$$

translucent
pale green.

1934. 8 Same as 1934. 2 but

June 20, 1934 At light at night.
1 ~~and~~ ^{and} ~~in~~

$$\text{Orth. } 0 + 61 = 61$$

$$\text{Other ins. } 1 + 506 = 507$$

1934. 9 Kijak section of the
Kihuyu Escarpment, 5200
feet (aneroid), Kenya.

At Kijak station. June 22, 1934
In mountain forest of various

trees, usually of but medium
height and dense, stands
of natu. bamboo and open
moss like swales of tuessoh
grass, nettle and other low
bush. Cold and damp.

Clonistria from ^{tall} grass.

Furcula and two species
of *Acrididae* all swept from
grass. (one *Paracrimma*?)

$$\text{Urth. } 5 + 61 = 66$$

$$\text{Other ins. } 27 + 507 = 534$$

1934. 10 As 1934. 9 but at night
at light. Same date.

$$\text{Urth } 0 + 66 = 66$$

$$\text{Other ins. } 21 + 534 = 555$$

1934.11 as 1934.9 but June 23,
1934.

Paricinema, Catantops
(short winged), ^{Humana} and Pygmaeophid
in grass and low succulent
ground cover in woods like
areas. This material all taken
by hand. The Pygmaeophid
is exceedingly active, the
Catantops much less so. ^{Humana}
very active - scarce - partial
to fall grass. ² seeds in grass.
(Orth 44 + 66 = 110)
(Orth in 20 + 555 = 575)

1934.12 as 1934.9
but June 24, 1934 and
solely in grassy glades between patches
of forest. The ground cover
is chiefly a coarse tussock
grass, a sedge, a tall nettle,
a rather low thistle and
other low plants. Little life
evident except when sun shines.

Humat. Blatted
running in
trail

Short winged Cutantops very common, active but easy to catch, in variety of corn.

Rather broad Pyrgomorphid ^{with pale median line} fair numbers, very active, particularly males, equally wide in habitat preferences. Green pyramorphid few, same habitat as other sp.

Zucampus one species active, numerous, in all low corn.

Male particularly elusive.

Peracampa few, but one ♀ seen and taken.

Neuronia scarce, all seen taken, very active.

Caloptenid-species local, in short grass, females ovipositing.

Xyph

Conocéphalus few adults - ^{thousands} of nymphs.

Nemobius but one seen and taken, in very short grass.

$$\text{Orth. } 114 + 107 = 221$$

$$\text{Other ins } 42 + 575 = 617$$

1934.13 as 1934.9 but June
25, 1934.

Female Gratidia from tall
grass. Short-winged Cotantops
from situation usual for
species - see previous notes.

Female Paramecia from low
ground corn grass.

$$\text{Orth. } 5 + 221 = 226$$

$$\text{Other ins. } 0 + 617 = 617$$

1934.14 as 1934.13 but at
light at night.

$$\text{Orth. } 0 + 226 = 226$$

$$\text{Other ins. } 11 + 617 = 628$$

1934.15 as 1934.14 but June
26, 1934. At light at night - except
 $\text{Orth. } 5 + 226 = 231$ as before
Other ins. 23 Trichia - juv.
Blattid in tent
 $31 + 628 = 659$ at night

1934.16 as 1934.
13 but June 28, 1934.
At light at night.

$$\text{Orth. } 0 + 231 = 231$$

$$\text{Other ins. } 15 + 659 = 674$$

Cnecphalus in wet
grass in afternoon

1934. 17 as 1934. 13 but June 29, 1934.
Ectobius running in dark tent.

$$\text{Orth. } 1 + 231 = 232$$

$$\text{Other ins. } 0 + 674 = 674$$

1934. 18 As 1934. 16 but June 29, 1934
At light, at night

Trifurcula in tent, running on
walls or ground cloth.

$$\text{Orth. } 3 + 232 = 235$$

$$\text{Other ins. } 26 + 674 = 700$$

1934. 19 As 1934. 16 but June 30, 1934.
At light at night.

Immature blattid in tent.

$$\text{Orth. } 1 + 235 = 236$$

$$\text{Other ins. } 28 + 700 = 728$$

1934. 20 As 1934. 19 but July 1, 1934
At light at night.

Ectobius africanus 2 ♂, one in frame's
tent; one in work tent

$$\text{Orth. } 2 + 236 = 238$$

$$\text{Other ins. } 18 + 728 = 746$$

1934. 21. Boko. Naranyuki and
the upper Juncos Ng'iro River, Kenya.
W. of Mt. Kenya. Elev. 6000 feet.
July 5, 1934

In very short, closely grazed
sun-cured bromegrass with scattered
trees and limited patches of

sprawling
very low mimosa and acacia bushes.

Putthia 1 single ♂ crawling on ground into low acacia clump.

Phymatodes. 2 ♂, 1 ♀, in heaver, but still short grass near house, the male when handled emitted fluid from thoracic glands with distinct, bubbling noise.

Uedalus, 3 ♀ scattered singly on the dry areas, flies reasonably well and fair distance. Pictodictya type few, in short grass, ^{near taller tangles,} not very active.

Adontomides few adults (2 ♂ 1 ♀).

immatures numerous, in short grass, active.

Aecida, chiefly immature, ^{ad. ♀ but none,} in short grass, active, free flying.

Emorphalus 1 ♂ only - in short grass.

Calidomantis 1 ♀ swept from low clump of grass - acacia.

Heteropternis (?) very common in short grass, moderately active. Few immat.

Rodania (?) Notice color phases.

Numerous and very active, particularly males.

Proxia (?), with short-winged females, much less numerous in same situation. ♂♂ very

difficult to capture.

Cosmopolysa not common, some
immature.

$$\text{Ckth. } 88 + 238 = 326$$

$$\text{Other ins. } 4 + 746 = 750$$

1934. 22 As 1934. 21, same
date, but at light at night.

$$\text{Ckth. } 0 + 326 = 326$$

$$\text{Other ins. } 6 + 750 = 756$$

1934. 23 As 1934. 22 but July
5, 1934. At light at night

$$\text{Ckth } 0 + 326 = 326$$

$$\text{Other ins. } 9 + 756 = 765$$

1934. 24 As 1934. 21 but July 6, 1934.

Work done in short ^{sun weed} grass in open
areas among ^{sun weed} brush - thorn trees.
Wind high, strong flying from long
long distances.

Acrida few, largely immature -
adults flying freely and for
moderate distances.

Rodusia (?) very common and
generally distributed, generally
in very short grass. Active but
easily captured.

Adontomelus few, in open areas of
thrust grass.

Aiolopus not common in thrust grass,
very active and flying freely - notice
color phases.

Cedaleus local but in fair numbers,
females flying for long distances,
much like Xanthippus, very wary.
Males much more readily approached.

Cosmorthyssa very few seen, one
taken, in open on bare ground.

Cedipoda (?) one taken, open ground.

Heteropternis (?) abundant, generally
distributed.

Pycnodictya (?). Not common, no
males seen. Wary, flying well but
firing more readily than Cedaleus.
Females apparently ovipositing in
ground on edge of tangle clumps.
Note color phases.

Small, short-winged Acridid. Appar-
ently partial to patches of low acacia
but easily frightened out. Acts like our
Aiolopus but more easily secured.

Small species?

Sphodromerus not common, all
seen except 1 ♀ taken. Latter sex
rather in action, males much more
active.

Phymatodes occasional, usually
in slighter, longer, green grass.
Can be unpleasant when handled.
Craneophanes 1 ♀ in short grass.

$$\text{Cuck. } 100 + 326 = 426$$

$$\text{Other inv. } 9 + 765 = 774$$

1934.25 As 1934.21 but July
7, 1934.

All material taken along the
edge of a wet area of tall grass,
some ~~was~~ in distinct wet ground,
others just away from this in
the adjoining dry stretches.

Tettigids common on wet areas,
taken largely by sweeping.

Bluronia (?) taken both in wet
and adjacent dry areas, common,
active. Several species?

Acolopus. Very common along the
border of wet areas, very active but
not difficult to capture. Often
hiding among grass roots, even
in wet areas.

~~#~~ Cosmocerapoda few on the border
land strip.

Dactylopterus (?) Common as Aesopus,
often hiding among grass roots.

Gastromargus numerous in wet
areas chiefly, but going into adjacent
dry sections. Females very clumsy,
short fliers, easily captured, very
different from Uedaleus in their
actions. Males somewhat more active
but still relatively slow moving.

Edentomachus (?) few, 2 males taken.

Brilliant green pygmymorphid very
local & rather scarce, extensive
search resulting in the capture
of the small series presented.

In wet areas but not of standing
water, a fair jumper but not
difficult to catch.

Euthymia - immature only,
one other seen only - in same
habitat as pygmymorphid.

Short-winged Acridid - scarce
in wet but not flooded area,
climbing.

Perithous 1 ♂ in hole in dead
tree!

Uranistes 1 ♀ beaten from tall
grass in wet area.

Euploystirides ^{juv.} *Blattaria* as *Blattaria*
Butterflies, etc. all beaten swept
from cut areas, of short and
long grass.

$$\text{Cervus } 147 + 426 = 573$$

$$\text{Other ins. } 66 + 774 = 840$$

1934. 26 As 1934. 25 but at
light at night in room.

Calidamantis 18.

$$\text{Euryglossa } 18 \quad 575$$

$$\text{Orth. } 2 + 513 = 515$$

$$\text{Other ins. } 70 + 840 = 910$$

1934. 27 Along upper Grass Nyiro
River, 14 m. W. of Nanyuki,
Kenya. Elev. approx. 5500 feet.
In grass ^{July 8, 1934.} and low bushes under
groves of tall acacia and similar
trees along the river. Environment
much more heavily shaded than
a few hundred yards in either
direction away from the river.

Short-winged bluntnosed - few adults,
no males seen. *Epasmanis* a few.

Cremophanes no numerous as adults.
Tylopsis but the 18 taken seen.

$$\text{Orth. } 11 + 575 = 586$$

$$\text{Other ins. } 6 + 910 = 916$$

1934.28 ~~Keep~~ Laikipia Plateau,
inland. W. of Guaso Nyiro River,
16 to 18 miles W. of Nanyuki,
Kenya. Approx. elev. 6000 feet.
July 8, 1934.

Rolling
Alternating open grass land and
open park-like thorn-bush country. Material
collected in short grass in scattered
thorn bush.

Juv. Calidomantis running on
ground. ^{Kager} Short-winged & acridid
The two taken all seen, on ground,
fair jumper. Single Psotrus argus
seen, taken. Juv. only of Calliptamus
Small Aerodrylus seen, one taken.
Two species of smaller short-winged
acridoid not common, the pair of
one (both sexes) and 3 ♀♀ of the others
all seen, active, on ground and in
short grass. Meromys and Oedipod
(Heteropternis?) common, on ground.

$$\text{Orth. } 26 + 586 = 612$$

$$\text{Other inv. } 3 + 916 = 919$$

1934.29 Nanyuki, Kenya.

Elev. approx. 6000 feet. July 8, 1934.

⁶²⁰⁰
Termites in flight at headlights
of car. Present in thousands, shedding
their wings. Orth $0 + 612 = 612$

$$\text{Other inv. } 22 + 919 = 941$$

1934.30 ^{West side of Mt. Kenya above} ~~to 1934.25 but~~ July

9, 1934 At light at night

Altitude. $0 + 612 = 612$

Altitude in. $10 + 941 = 951$

Haromoni, Kenya.
Elev. 7875 feet.

1934.31 As 1934.30 but July 10, 1934.

In the open grass land in front of camp, with scattered ~~tangles~~ clumps of low green bushes and small dried mud rhinoceros wallows.

Butterflies ~~March's~~ collecting - most bad.

Hemiptera, Diptera - Coleoptera sweeping.

Rodinia (?) scarce as adults - 2 ♂, 1 ♀, taken - all seen, immatures numerous. Chiefly in tall grass, perching lengthwise, but also in low tangles of grass.

Pyrgomorphid - males in fair numbers, females scarce, apparently in ^{small} local colonies, but on virtually any of the land cover. Males much more active than females.

Psathura argus few, two females - as seen - taken

Short-winged Catantops rare - one ♂ taken - 1 female escaped all seen.

Short winged *Euprepocnemid* - seen.
The ♂ & ♀ taken all ^{adults} seen. Several
jaws taken.

Conosporulus - very juv. numerous -
near adults few - no adults seen.

Orth. $34 + 612 = 646$

Other ins. $72 + 957 = 1023$

1934.32 As 1934.30 but July 11, 1934.

At night at night in mass tent.

Calidomantis ♂ alighted on inside
of fly.

Orth. $1 + 646 = 647$.

Other ins. $43 + 1023 = 1066$

1934.33 As 1934.31

Same place, same environment,
but much a little stirring. Berding
July 12, 1934 - eye work.
Two very juv. *Clonaria* - swept.

Heurostid - few adults, apparently
juv. if this very numerous
and in a number of instars.

juv. *pygmaeoides* few - all males (2)
seen taken - one ♀ escaped. Are
juv. secured this?

Euprepocnemid - some mature seen.

Three instars in juv. taken. Very
active, not common.

Monatophaea 18 jumping in
long grass.

Encephalopus juv. only, numerous

Orth. $20 + 647 = 667$

Other ins. $25 + 1066 = 1091$

1934.34 As 1934.30 but
July 12, 1934. At light at
night. Whizzling.

Orth. $0 + 667 = 667$

Other ins. $21 + 1091 = 1112$

1934.35³⁰ As 1934.30 but July
12, 1934.

In heavy mtn. forest at sunlight
holes in foliage of shoulder-
high dense woody undergrowth.
Immature phaneroptids of two
species.

3 ♀ green ♂♂, 1 brown ♀, 2 immatures.

Apterous. cytharanthoid.
jumping on foliage, not active - all seen
~~Orth.~~ Orth. $8 + 667 = 675$ taken

Other ins. $24 + 1112 = 1136$

1934.36 As 1934.30 but July
12, 1934. At light at
night. Unsettled - sprinkling.

1 Calidomantis on inside
of mesh tent - resting

Orth. $1 + 675 = 676$

Other ins. $19 + 1136 = 1155$

1934. 31 As 1934. 30 but July 13,

1934. In grass land down the slope from the camp

Chironomid - adults few, immatures quite numerous - all very active, adults difficult to secure but all seen taken.

Apterous pyrgomorphid few, all seen taken - 1 ♂, 2 ♀. Representing green & brown color phases.

Euprepocnemid - juvs. in about three instars only.

Cerocephalus 1 ♂ adult, all thus seen immature

$$\text{Orth. } 17 + 676 = 693$$

$$\text{Orth. ins. } 58 + 1155 = 1213$$

1934. 38 Nairobi, Kenya.

Elev. 5500 ft July 16, 1934.

In building hiding by day &

attracted to lights at night. except

Phymateus which were hopping on grass

$$\text{Orth. } 2 + 693 = 695 \text{ at Klein's house}$$

$$\text{Orth. ins. } 30 + 1213 = 1243$$

1934.39 Gisi River, betw. Machakos
and Sultan Hamud, Kenya. Elev.
~~3375~~ ⁴⁵⁵⁰ feet. July 17, 1934.

At night with light.

Insect. *Adiantum*.

& *Conopsea*.

} Both on stem
of plant.

Orth. $2 + 695 = 697$

Other ins. $0 + 1248 = 1248$

1934.40 Athi River Crossing,

16 m. N.N.E. of Kibwezi, Kenya.

Elev. \approx 1400 feet. July 18, 1934.
Hippodamia? walking on ground at night
Acrostylus (?) in alder at ^{in camp} base

land just back from river
bank - active.

Arctophaga in sparse com on
same sand.

Mantis - attracted to light at
night.

Nettionid. walking on sand at
night.

Orth. $76 + 697 = 703$

1256

Other ins. $73 + 1243 = 1246$

1934. 41 Same as 1934. 40 but
July 19, 1934.

In ~~area~~ one dry brittle dead brown
brush, waist to shoulder high, with
thick ground ~~litter~~ litter of broken dry
twigs, usually less than $\frac{1}{4}$ " in diameter,
with a few bushes bearing medium to
small green leaves, in open tree stand
of baobab, ~~and~~ acacia, mimosa and
other trees. A few small patches of
dune dried coarse grass, heavily grazed,
apparently by game. One of the
most complete dry & "rich" insect faunas
I have seen, with strange dead leaf
like hemipter most like hemipters, etc.
Most ~~vibrant~~ leafless.

♂ & ♀ Centolla-like mantid on ground,
the ♀ running among dry twigs,
the ♂ flattening on same.

Geopetrolid-like mantid swept from
dry shrubbery.

♂ & ♀ + juv. Clonaria walking (!) on
ground or swept from dry bushes,
often seen crawling along. Numerous.
Panga common on low ever, dead
twigs, etc. - all juv. ? - a fair
jumper, but not as active as
Acridea.

Acridea adusta few, all seen
taken, juv. not as common as
those of Panga. adusta very
active - not easy to catch.

Oedaleus - fastuarius, all
seen taken, among dead twigs
+ litter on ground.

Humbe sp all seen, same notes
as Oedaleus.

Long-winged Catantops Thistle

3 taken - all seen - jumping in low
dry leafless brush.

Short-winged Catantops - 2 seen -

1 taken, same habitat as preceding.

Tamias juvs. - 2 sps? -
ground with only twig litter.

Acrostylus? adult + juvs. on
a more sandy spot near river
+ camp.

Plagiop Plagiotripes 2 juvs. seen -

1 taken - swept from green leaf
brush, of which 2 leaves are
in series. May be peculiar to
it.

Thericles-like dead brown
cinnabarid - juv. swept
from twig littered ground.

Mesopis 1 ♀ from tall sun-
cured yellow grass - no more
found.

from short winged Adonturid. - 1 ♂
about camp - from secured it.

Cossyphalus 1 ♂, 1 ♀, swept from
some dry leafless bushes.

Ceratoderus 3 ♀ swept as Cossyphalus

$$\text{Orth. } 81 + 704 = 785$$

$$\text{Other vis } 28 + 1250 = 1278$$


1934. 42 As 1934. 40 but July 19, 1934
At night, at light unless otherwise
indicated.

Supella sp. 1 ♂ running on bark
of a large acacia tree.

Calotampa 1 ♀ running on ground
at camp.

Centella 2 ♂ attracted to camp
lights.

Walking sticks - all on bark of
acacia trees (all single males,
vibrating up & down) or largely
paired on the twigs and foliage
of the lower branches of the
same tree. All from the one
tree. Great ♀♀ with normal males.

Heterodid ♂ stridulating 
on twig of a low bush
(3 feet) very close to camp. Strid.
a continuous wireless-like
sputter, but not at all broken -

not disturbed by light.

Podocentid, ♀, lid - single
female resting quietly on
dead twig of same acacia
tree - active when disturbed -
not trace of male.

✓
Cush. $41 + 785 = 826$

✓
Cush. ins. $37 + 1278 = 1315$

Strange wingless ♀ Eumastacid resting
on the bark of the same acacia - like
the Podocentid marvellously
protected.

1934.43 As 1934.40 but July 20,
1934. At light at night in
camp, n, where specified, about
camp with flash.

♂ Tivia attracted to light in camp.

♀ Hoplocorypha perched on tip of
10x inch low tuft of vegetation -
not grass.

♂ Centulacid. attracted to light.

Phaenids - all on same acacia
on its foliage where series were
taken previous night.

Petasia brought to me by cook
man after dark, probably in
ground.

Imm. phaneropterid adult on
tall cane along river - with flash.
Imm. from phaneropterid in low
brush in camp - flash.

Heterodid ♀ - walking across heavy
bare sand in camp.

Hesperid butterfly asleep on low
brush, picked off. Moth-like butterflies
in tent at night.

$$\text{Orth. } 31 + 826 = 857$$

$$\text{Other ins. } 43 + 1315 = 1358$$

1934.44 As 1934.40 but July 21, 1934.

At light at night about camp.

Imm. Hoplocorypha running among ground litter
Phasmids all in same area
as was examined previously.

Brachytropes, ^{juv.} foraging actively
on sand ^{for} of meso shack.

Tridactylus to light at table.

Phaneropterid - same.

$$\text{Orth. } 17 + 857 = 874$$

$$\text{Other ins. } 14 + 1358 = 1372$$

1934. 45 As 1934. 40 but

July 22, 1934. Working in dry scrub,
on bare sand, beating the few shrubs
in the scrub still holding leaves and
the scattered sheaves of sun-dried
coarse grass, either entire or closely frayed.
♀ Achlaeniid mantid sitting motionless,
longitudinally on a twig but a few
inches from the ground.

Juv. Caribia swept from low bushes.

Juv. Pseudocrotophaga ^{with green leaves.} same data.

♂ Hoplocorypha flitting over
ground litter.

Large ♂ phasmid swept from
tall sun-cured grass.

Other phasmids swept from
brush, both leafless and with
sparse green leaves.

Plagioprius juv. swept as Caribia.

Juv. Curmatidae swept from
dry, leafless scrub.

Heurion a very few on ground
litter.

Hemiteles ♀ in bare red soil
road.

Acrotylus only on bare sand

immediate on the river shores -
very active, juvs. most numerous.
Chrotogonus almost entirely
restricted to same environment,
adults few, juvs. in great
numbers and of all sizes. Active
for a shabby species.

Calamus + Acrida, juvs. local and
not common - in among
twigs and sun-cured grass.

Tanita species. One adult
only in twig grained litter -
juvs. not common in same
situation.

juvs. pamphagids under dead
litter
word in ground.

Oxyrhopes juvs. - a few, only
in sun-cured coarse grass.

Catantops occasional in
higher weeds near river and
in dry scrub - strong and
vigorous flyers as well
as jumpers.

Euphemis 1 ♂, 2 ♀, beaten
from low bushes with small
green leaves.

Sphodromerus 1 ♀ in ground
in twig tangle.

Ectatoderus beaten from
twigs and bushes, probably
all without foliage.

$$\text{Orth } 73 + 874 = 947$$

$$\text{Other ins. } 20 + 1372 = 1392$$

1934. 46 Same as 1934. 45, same
date, but at light at night, ~~unless otherwise stated.~~

$$\text{Orth? } 16 + 947 = \overset{963}{\cancel{948}}$$

$$\text{Other ins. } 10 + 1392 = 1402$$

Phasmids all on acacia tree
previously examined

1934. 47 As 1934. 40 but July
23, 1934. At night - all at
light unless otherwise stated.
Juv Mantid & Phasmids on acacia tree
by camp.

pytharid juv. jumped on
me at evening meal.
♀ Supella dead in ground

$$\text{Orth } 15 + 963 = 978$$

$$\text{Other ins. } 10 + 1402 = 1412$$

1934. 48 As 1934. 40 but July 24,
1934. At light at night unless
otherwise indicated.

Chrotogmus in same immediately
about camp & along river, in afternoon.

Acrostylus ditto. Very active.

Netorid juv. in dead shell which
was brought in.

Tridactylus att. to light at Valla.

Cicadellids in same along river.

Phasmids from acacia tree at camp

at night. Female in same

position with reference in

Orth. 35 + 978 = 1013

Other ins. 11 + 1412 = 1423

Specimens not straight
others widely
extended.

1934. 49 As 1934. 40 but

July 25, 1934. Two types
of country examined, first

the bare sand areas immediately
along the river bank and, second,
an open area of tall sun-cured
coarse grass with scattered low
bushes sparsely supplied with
small oval leaves, the whole
of the latter area surrounded
by thorn-bush scrub.

Juv. harpagid mantis beaten from
silvery sun-cured tall grass.

Juv. green mantid mantis beaten from
small leaved bush. Trachodes ♂ running on ground
Hoplerythra ♀ running on ground litter on same near by.
sample ♂ fluttering along one same near by.
Mantodea represented by four
species, the largest, beaten from
leafless, silvery gray bare stemmed
bushes, the other three species
taken from tall sun-cured yellow
grass, all occurring in identical
surroundings in an area not more
than three hundred by two hundred
feet.

Acrida scarce as adults in ^{among} grass,
lighting on ground. Both adults &
juvs.

Mesopsis only in sun-cured silvery
tall coarse grass, not very active,
all taken beating, perching
lengthwise on stems.

Macharidia in ^{silvery} sun-cured grass and
low, similarly colored bare bushes,
reasonably active. Oxyrhina in
grass only.

Acanthopneuste very active, difficult
to catch in grass only.

Stout diurnal in bare low bushes,

in grass area, very active.

Aerostylus on bare sand only.

Cherotrogmus ditto.

Autopus on ground in grass area.

Juv. pygmy-morphid in among bare
brush stems only; from green leaved brush.

Adolfia (?) from green leaved brush.

Euschnuridia (?) beaten from brush
with small green leaves and from
bare twigs of leafless brush.

Adonturid ♀ swept from green leaved
brush.

Yellow green phaneropod ditto
from sun-cured grass.

Amorocorypha ditto.

Oecanthus ditto.

Conocephalus ditto.

pyllacrid from small leaved
brush.

Ectatoderus in general sweeping
of bare stemmed bushes and
small green leaved brush.

Juv. Encopturid from mixed
brush sweeping.

Orth. $98 + 1014 = 1112$

Other mis $77 + 1423 = 1500$

1934.50 As 1934.40 but July 25,
1934. at night.

^{the} Brachytrapes, running over sand
about camp.

$$\text{Orth. } 2 + 1112 = 1114$$

$$\text{Other ins } 4 + 1500 = 1504$$

1934.51 As 1934.40 but July
26, 1934 about camp in
daytime.

Atroxid brought in by men.
Calolampira on floor of Green's
tent.

$$\text{Orth. } 2 + 1114 = 1116$$

$$\text{Other ins. } 5 + 1504 = 1509$$

1934.52 As 1934.40⁵¹ but in
evening attracted to lights
or taken with flasher.

^{Asian}
Phasmids in tree.
Jyellacid attracted to lights
at table.

$$\text{Orth. } 12 + 1116 = \del{1118} 1128$$

$$\text{Other ins. } 8 + 1509 = 1517$$

1934. 53 As 1934. 40 but July
27, 1934. Attracted to light
at light.

Calotampa running on ground
in moss shelter.

Rigania attracted to light.

Taraxodes. " " "

Small ladybirds " " "

Phasmod on ground in moss
shelter.

Orth. $8 + 1128 = 1136$

Other ins. $6 + 1517 = 1523$

1934. 54 As 1934. 39 but
July 28, 1934.

Swarming and beating in tall
grass about camp site late
in the afternoon.

Tenebrion superstitiosa 1 ♀. except.
Phasmoda ditto.

No especial notes on other
species. Humulus predom-
inating, occurring adults
requiring steady work.

Orth. $162 + 1136 = 1298$

Other ins. $7 + 1523 = 1530$

1934.55 As 1934.54 but July
29, 1934 Environment identical,
simply continued work the next
morning. (No use of formalin ^{dispos. poss. etc.})
Pharmids - from 8 & alone repres. by three
species.

Juv. Mantids repr. 3 genera, one
prob. Agrionopsis

Cicadas 1 ♀, appar. africanus.

1 juv. Cymatodid only seen - Taken.

Memorid exceedingly active and
difficult to capture.

Cutantops much less active and
Procris the easiest of all,
most abundant.

Three species of Conorhaphis
represented, the brownish one
far the commonest.

Oedallus on ground under grass,
only one seen.

Oecanthus beaten.

Phaneropterids beaten.

Elmidae conorhaphids very
scarce, all seen taken.

Orth. 162 + 1298 = 1460

Other ins. - 28 + 1530 = 1558

1934.56 Athi River Station, 20 miles
from Nairobi, Kenya. Elev. 4949 feet.

July 29, 1934. Beating in
tall grass, in part grazed,
in a grove of Tall ^{pale} green barbed
acacias. Juv. black mantids.

Juv. ♀ Hoplerythra. Two species
of phasmids, 1 ♂ of one, 5 ♂♂ of
other, several females.

Chrysomelid, very active; also short-
winged acridid. Catantops

few. Numbe, all on ground,

all seen taken. Patanga ♂
made one long flight and then
becoming entangled in the base
of grass clump was captured.

Amorocorypha few, ♂ - ♀ taken.

Cetostoma
Orth. $39 + 1460 = 1499$ beaten.
Other ins. $7 + 1558 = 1565$

1934.57 Kiboko, S.E. of Simba,
Kenya.

July 28,
1934. At light at night.

(H. T. G.)

Orth. $2 + 1499 = 1501$

Other ins $3 + 1565 = 1568$

1934.58 Nairobi, Kenya. 5500 feet.
Aug. 7, 1934. At light at
night.

Alt. $0 + 1501 = 1501$

Alt. vis. $11 + 1568 = 1579$

1934.59 ⁵⁹ 6 miles S.W. of
Kakamega, Kenya.

Alt. 5200 Aug. 5, 1934. Beating
and sweeping in rank grass
and weeds ^(4'-6') on hillside by
camp.

Marisa ♀ beaten from weeds.
Pseudullia ? (serrate-margin) ad. & juv.
ditto.

Juv. Oxyopsid mantid. ditto.

Tettigid ♂ & ♀. beaten from low
down in dense grass.

Edentomela juv. in grass, low
down

Chironid - 2 species one long
- one short winged - in both weeds
& grass.

Morphacris 1 ♀ in low grass.

Juv. Acrostachys general beating.

Short winged psyllomorphid -

Juv. high up in weeds 4-
6 feet high.

Cutaneus few, low down.

Euprepomacrus 1 only, low down, ground cover.

All tettigoniids from weeds, rather high.

Trymedon taken from weeds.

Remosid ditto, few adults.

Count. $73 + 1501 = 1574$

Other inv. $60 + 1579 = 1639$

1934.60 As 1934.59 but at night at light, about tents.

Ectolius afric. ♂♂ on inside of mess tent.

Miomantis ♂♂ (without femoral spots) on inside of mess tent.

Acridium sp. on my tent.

Eurygaster, Homatophagid. - smaller phaneropt. on inside of mess tent.

Pryllus ad. ♀ + juv. ♀ on wall of my tent.

Count. $20 + 1574 = 1594$

Other inv. $74 + 1659 = 1733$

1934. 61 As 1934. 59 but
^{Aug.} July 6, 1934. About camp,
brought to me by mess.

♂ Catantrops

♀ Patanga

♀ Cyrtacanthacris

Cuth. 3 + 1594 = 1597

Other inv. 1733 + 0 = 1733

1934. 62. Kitale (Kisumu),

Entebbe District, Uganda.

Aug. 7, 1934. Sweeping and
beating in grass and weeds
about camping site on shore of
Lake Victoria.

Moths all at night at light in
tents. Blattella with light at night
in tents. Tettig. apparently low in count,
nearer ground. Eucyrtis in
quite tall grass, few adults.
Petraria in heavy weed
patches, low down, sluggish.

Cuth. 28 + 1597 = 1625

Other inv. 74 + 1733 = 1807

1934. 63 As 1934. 62 but Aug.

8, 1934. Beating and sweeping
in open grass about camp,
and along trail in second
growth forest.

Diaperidius erythroc. ♀ + 2 juvs.
swept from low foliage on trail side.

Juv. *Bruchellia* (?) ditto. 2 *Ceratis-
pleura* from one bush on ditto.

♀♀ (one each) of 2 species of
Symphloc from same situation.

Tettigids all from ground sweeping
in both grass land + 2nd
growth forest.

Dark-brown flightless grasshopper
on rather bare floor of 2nd growth
forest. (Beautiful long-winged green
buckled brought me by cat.)
Spathocheilus ♀ in grass.

1 Katydid beaten from foliage
in opening in 2nd growth forest.

Eucryptis in grass in open, mainly
juvs, many very small.

Syrphus on ground in opening
in second growth forest.

Thaumococcus on foliage of
2nd growth forest border wall.

Orth. 24 + 1625 = 1649
Other ins. 59 + 1807 = 1866

1934.64 As 1934.62 but
Aug. 8. 1934 at light at night.
Orth. 0 + 1649 = 1649
Other ins. 29 + 1866 = 1895

1934.65 As 1934.62 but
Aug. 9. 1934 along shore of
Lake Victoria. and about camp.
Orth. 1 + 1649 = 1650
Other ins. 15 + ~~1866~~
1895 = 1910

1934.66 As 1934.62 but
Aug. 9. 1934 Sweeping. beating
about camp & along trail to
forest.

Acinacris juv. in dense
side vegetation.

Arumida ditto.

Spithamea in grass.

Encyrtus in grass.

Acrida sweeping in low
creek.

Thamnoscelus in road side
creek.

Arth. $30 + 1650 = 1680$
Other no $28 + 1910 = 1938$

1934.61 As 1934.62 but
Aug. 9, 1934 and on trail side
vegetation in primary forest.
Igna florina resting on foliage
of low cane.

Ptychoptera on foliage (green) or
wintering on dead leaf (brown),
also in various places.

Blattella swept from low tree
foliage.

Chironomids on low cane or
on ground.

Pterigids of Ternstroemia or in very
low cane.

Chamaemydidae, ^{+ Conomydidae} on green
foliage.

Pteropoda, Ceratomyx -
strange fly-like on foliage
of undergrowth.

Arth. $45 + 1680 = 1725$
Other no $85 + 1938 = 2023$

1934. 68 As 1934.62 but
Aug. 9, 1934 at light at
night.

Symptoms 2.8 in my tent.
Fuglids ditto.

Orth. 4 + 1725 = 1729

Other ins 2 + 2023 = 2025

1934. 69 As 1934.62 but Aug.
10, 1934 at light at night.

Orth 1 + 1749 = 1750 1730

Other ins. 10 + 2025 = 2035 2041

1934. 70 As 1934.62 but

Aug. 11, 1934. Unless otherwise
noted along trail in second
growth forest or adjacent elephant
pass. Phanopt. flitting through
elephant pass.

Orth. 1 + 1750 = 1751

Other ins. 19 + 2041 = 2060

1934.71 As 1934.62 but

Aug. 11, 1934 at night at

light. in my tent at night.
Cuth. $1 + 1751 = 1752$

Other no. $13 + 2060 = 2073$

1934.7 - as 1934.62 but Aug.

12, 1934. Sleeping + breathing

in grass about camp, in small
growth forest and in coarse
grass 4 feet high, with bushes
+ weeds.

Chrysomelids only from blades of
coarse grass.

Symplecta sp. of water from low
cushes + grasses in tall grass
area.

Pro. Mantis + *Pro. phasmid*
Mantis

Pro. black mantis from under
growth in second growth forest.

Herminid ♂ + ♀ in grasses + weeds.

Campoplex ♂ in tall grass.

Chrysomelids of water from
bush in grass area.

Conocoryphus in bushes, less
about grass at camp.

Tettigids in plen of second growth
the forest.

Other phaneropterid from bush
flange in pass area.

Chrysomelids from tall grass
only.

Cuscutas from less rank grass
at camp.

Juv. Uccanthes from grass.

$$\text{Arth. } 34 + 1732 = 1766$$

$$\text{Other ins. } 68 + 2073 = 2141$$

1934.73 As 1934.62 but Aug.

12, 1934 at light at night.

Heteroptilis in mess tent.

Juv. Supella ditto.

$$\text{Arth. } 2 + 1766 = 1768$$

$$\text{Other ins. } 24 + 2141 = 2165$$

1934.74 As 1934.62 but Aug.

14, 1934 at light at night.

Pitacia in tent.

Paracimexia in mess tent.

$$\text{Arth. } 2 + 1768 = 1770$$

$$\text{Other ins. } 8 + 2165 = 2173$$

1934.75 As 1934.62 but
August 15, 1934. In ^{prim.} forest and
along trail in second growth
forest. Using butterfly net
only. Chiefly butterflies taken.
Orth. 0 + 1770 = 1770
Other ins. 80 + 2173 = 2253

1934.76 As 1934.62 but
August 15, 1934 at light at
night. ^{mantid, katydid}
Tettigids, Gryllids, and Glyptotendipes
gammia and Oxyhalon in
bush at night.

Orth. 9 + 1770 = 1779
Other ins. 1 + 2253 = 2254

1934.77 As 1934.62 but
Aug. 16, 1934. Hemipt. all
on one acacia.

Orth. 0 + 1779 = 1779
Other ins. 28 + 2254 = 2282

1934.78 Butiaba, Lake Albert,
Uganda. Elev. 2080 feet.
Aug. 18, 1934. At light at night.
Beetles only, exc. 1 Gryllotalpa.
Orth. 1 + 1779 = ~~1780~~ 1780.
Other ins. 10 + 2272 = 2282

1934.79 as 1934.78 but Aug. 19,
1934. Beating and sweeping
in grass back from beach.

Lush grass - not at all salt,
in some places with low weeds.

Phaenids in fair numbers - all
adults seen taken - all swept.

Mutids all seen - all swept.
Sp. *Stenocranus* common, very active
and elusive.

Conoclyptus common but adults
not seen. immatures

single *Ptilinopus* swept.

Ceryle common, very active,
keeping near ground.

Platyspiza but no seen, swept.

Crab. 47 + 1750 = 1827 ^{these in life}
other was 18 + 2282 = 2300

1934.80 as 1934.79 but beating
and sweeping on strand vegetation
along beach of Lake Umbagog. Same
date.

Salicetia under grass in beach.
Salicetia beaten from leguminous
bush in beach sand.

Acrida me juv. bratum from
tall grass.

Calamagrostis ditto

Tenodera supracincta ditto

Chrostrogaster in nearly bare
sand, not numerous.

Cryptorhynchus ♂ & ♀ in
tall grass about Agurminous
fresh on track.

Epaminia in grass.

Catantops " "

Taranta ♂, ♀ & juv. in track track.

Phasmodon in grass.

Orth. 26 + 1827 = 1853

Uther in. 23 + 2300 = 2323

1934.88 As 1934.79 but at light
at night.

Brachytripes brought by
Nicomachus numerous on

inside mess.
upline this ditto.

Uther in *Nicomachus* (Tasachina?)
first one, in
same position.

Pyrrhus resting on edge
of mess track.

Orth. 13 + 1853 = 1866

Uther in. 20 + 2323 = 2343

1934.82 Kasenji, ~~the~~ Lake
Albert, Heri Wist, Belg. Congo
Elev. 2100 feet. Aug 21, 1934.

At night, attracted to light
unless otherwise noted.

Memoranda at table.

Periplaneta in wall of toilet -
many others.

Birth. $2 + 1866 = 1868$.

Other inc. $5 + 2343 = 2348$

1934.83 As 1934.82 but

August 22, 1934.

Swarming, feeding and individuals
picking in grass in front of
house between showers.

Leptomyia D. ♀ all taken from grass
of but average length, numerous.
Blattella common in that place,
sometimes on the ground.

Periplaneta 1 ♂ + 1 juv. all seen,
on ground in grass area.

Trichopoda common on ground
in grassy area, not part. active.

Acrostyphus few in bare border of
road, active.

Tenebrio ♂ & ♀, common in
ground in grass area, not
one active. All in brown
grass except one seen female.
Chrysomelids common near bare
road, mostly immature.
Curculio a few, no adult females,
in tall grass.
Chrysomelids numerous in the
tallest grass, when jumping
a little fast and noisy,
but when in rest, very quiet.
Phyllorhynchus numerous
in tall grass and weeds.
Phyllorhynchus abundant in
grass.
Chrysomelids a single ♀ seen
from grass.

With 111 + 188 = 1979

With 50 + 188 = 2398

1934.84 As 1934.83 but
Aug. 23, 1934. Exactly the
same environment in an
overcast morning.
Phyllorhynchus 1 ♂ swept

from grass. Taranta very common.
Ochrilidia in fair numbers.
Crematogaster single spec. on
luc ground. Gastrancistrus
1 ♀, 1 juv. in among grass
tufts. single Euprepomoid
in grass. 1 ♂ Catantops ditto.
+ Erylus on ground. Thamno-
pus 1 swept.

Orth. 51 + 1779 = 2030
Other ins. 9 + 2398 = 2407

1934.85 As 1934.82 but
Aug. 24, 1934 Collected by
native boys - no notes.

Orth. 36 + 2030 = 2066
Other ins. 75 + 2407 = 2482

1934.86 As 1934.84 but
Aug. 24, 1934 at night at lights
in house.

Peripl. surr. + Hemionysus

Orth. 2 + 2066 = 2068
Other ins. 4 + 2482 = 2486

1934.87 As 1934.82 but

Aug. 25, 1934. Along Juma

road within a mile of town,
through manioc fields, woods
and the farthest part through
grass savanna. Beating, sweeping
and picking along road side, except
for some beating in very tall
(5 ft) grass, which contained
almost nothing.

Tettigids (2) swept from taller
areas on roadside.

Cerica few in roadside woods.

Trilophidia a. on road, not
common.

Reveries few in grass on roadside.

Taraxia common.

Acrida? - note 2 color phases like
Ch. strophys - activities much like
in latter. *Gastrancistrus* few
in under shrubs. *Acrotylus*
on bare road, active.

Catantops but the 1st seen,
very active, jumping into
deep grass - not roadside.

Catantops 1 in deep grass only.

Ammodramus 1 shot in Ash from
ten feet up in tree - no nest
visible - young visible - the
species is a most powerful
flier - always alighting up in trees.
No. Tringoides except roadside.
Ardeotis 1 on floor of house.

$$\text{Length. } 25 + 2068 = 2093$$
$$\text{Other no. } 32 + 2486 = 2518$$

1934.88 As 1934.87 but taken
by native boys - no notes.

$$\text{Length. } 64 + 2093 = 2157$$
$$\text{Other no. } 6 + 2518 = 2524$$

1934.89 As 1934.82 but
Aug. 26, 1934. Beating, jumping
and picking from tall grass
in more rolling country than
previously examined.

No adults seen of the Black-
headed woodpecker represented
by juvs. Arremonops quite
numerous in a tall
scrubby grass with blackish

tops. Tettigids all taken
by ground sweeping along
a trail. Mimantia, juv.

Chrysomelids, phasmids, Conocoryphids
all by beating. Acrostylus,
other Orthoptera in or near
ground. Heterostylus 1♂, 2♀,
all seen, in tall grass. Catantopus
1♂, 1♀, all seen, in very tall
grass, jumping about low
down.

Orth. 84 + 2157 = 2241

Orth. ins. 7 + 2524 = 2531

1934.90 vs 1934.86 but
Aug 27, 1934. Beating and
sweeping in short and but
moderately long grass about
lower of down.

Tenebrion separatissima 2 juv.
only - beaten from taller grass.
♀ phasmid ditto.

Tettigids from ground under
very short grass.

Acromioid in fair numbers.
Large acromioid 1 juv. only
in grass.

Tenita very numerous in
all types of grass.

Chloridea not particularly
numerous here.

Acrostyus along road in short
grass only.

Triophtidea few, ditto but
in the grass itself!

Morphacris 1 ♀ only, swept.

Acrida frequent, most
females immature.

Euprepomoid juv. only in
taller grass.

Eucryptus few, taken from rather
tall grass.

Acanthus 1 ♀ taken.
Small isomorphid cyrtopodid, ditto.
1 ♀ heavy pygidial taken.

$$\text{Orth. } 72 + 2241 = 2313$$

$$\text{Other inv. } 36 + 2531 = 2567$$

1934. 91 As 1934. 82 but
evening of Aug. 27, 1934 at
light in house except as
noted.

♂ *Sphenomantis centralis* -
in wall of mess room - prob.
1 ♂ known.

Microgaster same place.

♀. *Paraneura* - Aug. 28. in
Paraneura on bush.

Uth. 3 + 2312 = 2315

Uth. in. 5 + 2067 = 2072

1934. 92 As 1934. 82 but in
house at light evening of
Aug. 28, 1934.

Microgaster on floor, jumping.

Paraneura in bedroom.

Uth. 2 + 2316 = 2318

Uth. in. 1 + 2572 = 2573

1934. 93 As 1934. 82 but
Aug. 29, 1934. am.

Phengia in house. *Phengia* in house.
Phengia from under. *Phengia* in house.

Phengia from under.

Orth. 3 + 2318 = 2321
Not Orth. 2 + 2573 = 2575

Njiana Farm,
1934. 94 Region of Bunia, Ituri
Dist., Belg. Congo. Elev. 3500 feet
Aug. 29, 1934. (Bunia-Ituri)

Insects along road near
coffee. Patanga flying up
from road.

Orth. 3 + 2318 = 2321
Other ins. 2 + 2573 = 2575

1934. 95 As 1934. 94, same date
but at night at light in mess
tent - very tent.

Orth. 2 + 2323 = 2325
Other ins. 37 + 2575 = 2612

1934. 96 As 1934. 94 but
Aug. 30, 1934. Beating and
sweeping in thicket grass (12 to
14 inches) immediately in
front of camp.

Acrida few, very active.

Urosomus common.

Phaenocarpa & gros. taken all
even.

Acrida & taken all even.

Cephus (spec. swept).

Hemionyscus 1 ♂ only.

Canis 1 ♂ only when

plus 1 ♀ lost all adults seen -
many juvs.

Megascops 2 juvs. all seen.

Thomomys 1 juv. only.

Orth. 27 + 2325 = 2352

Other ins. 48 + 2612 = 2660

1934.97 As 1934.94 but Aug.

31, 1934. At light of mess tent
in evening.

1 squirrel,

1 baby deer, 2 Hatties, 2
muntjacs.

Orth. 6 + 2352 = 2358

Other ins. 9 + 2660 = 2669

1934.98 As 1934.94 but

not dated. Presented by

Capt. Geoffrey Catchpole.

Orth 0 + 2358 = 2358

Other ins. 5 + 2669 = 2674

1934. 99 As 1934. 94 but
~~Aug.~~ Aug. 31, 1934 at night
not caught.

♂ + ♀ *Diapristicus* ^{new} ~~test.~~

♂ *Hypsologannia* ~~ditto~~.

♀ *Pythodes* in my Tent.

Both. 4 + 2358 = 2362

Other vis. 33 + 2614 = 2707

1934. 100 As 1934. 94 but
Sept. 1, 1934. Breeding &
foraging in medium & long
grass, and along road.

Urida few: Calamus 2 juvs.

in tall grass only. ^{not med.} *Urida*

juv. Urida, common: ~~for~~ *Chro-*

gus only in bare road cuts,

most common. *Chyrrhipid* ~~common~~

juv. only in tall grass.

Acrotyrus on road only, active.

Hetero ? ~~ditto~~.

Triophtia "

Cosmorrhiza " , very active.

Juv. *Euprosennidae* in
both types, very active, no

adults. *Hemirhamphus* 1 ♂
only, in medium grass.

Thamnotis 1 only, in ditto.

Conocorymbus few adults,
many juvs., several in both.

Megascops 1 juv. only, in

fall grass. *Thamnositta*

1 only, medium grass. 1 yellow
in my tent in ditto.

With. $43 + 2462 = 2405$

Other vis. $28 + 2707 = 2735$

1934.101. As 1934.94 but
Sept. 1, 1934 at light at night.
Reipera ~~affinis~~ ^{lymphae} + mantids in
meadow + my tent.

With. $8 + 2405 = 2413$

Other vis. $23 + 2735 = 2758$

1934.102 Crossing of Epule
River (Epule Portage), betw.
Mamasa and Caragola,
Kilale - Yuni Dist., Belg. Congo.
Elev. 2500 feet. Sept. 2, 1934

At night at night at Camp

Putnam, except two *Phodromantis*
which I have taken at dusk
while waiting for the ferry at
the river.

With. $\frac{4}{2} + 2413 = 2417$

Other mis. 20 + 2758 = 2778

~~1934. 103 Camp 6 m. N. of
Kassey, Lake Albert, Belg.
Congo. Aug. 26, 1934 at night.~~

~~*Reucophaca* ♀ kept alive
in bottle for some days, from
birth to the living young also.
none listed~~

~~With. 20 + 2417 = 2437~~

~~Other mis. 0 + 2778 = 2778~~

1934. 104 Same as 1934. 100
Sept. 3, 1934. In forest.

Butterflies, ^{+ all} at excreta.

Ants on tree trunk & ground.

With. 0 + 2457 = 2457

Other mis. ♀ + 2778 = 2787

1934. 105 Saidi, Drummer-Avalanti
Road, 10 m W. of Epulu Ferry,
Kibale-Muri district, Belg. Congo.
Elev. 2000 feet. Sept. 3, 1934.
At light at night at mess in
in my tent.

Tridactylus on dinner Table.
Orth. $2 + 2437 = 2439$
Other ins. $15 + 2787 = 2792$

1934. 106 As 1934. 105
but Sept. 4, 1934. Bought
from natives as collected by G.O.
(latter dept. 1 Epulu)
Orth $10 + 2439 = 2449$
Other ins. $10 + 2792 = 2802$
 2804

~~1934. 106~~

1934. 107 As 1934. 105
but at light at night Sept. 4,
1934.

Tridactylus - freyle in my
tent.

Orth. $2 + 2449 = 2451$
Other ins. $3 + 2804 = 2807$

1934. 108 As 1934. 105 but
Sept. 5, 1934. Bought from natives
in Faben while trading. Evening flight
Orth. $11 + 2451 = 2462$
Other ins. $43 + 2807 = 2850$

1934.109 As 1934.105
but Sept. 6, 1934. Either
bright from windows or picked
up about quarters in day time.

Arthropods 3 + 2462 = 2465
Other ins. 12 + 2850 = 2862
Phrynosoma var. (2) a *Stenocryptus*.

1934.110 As 1934.105
but at light at night Sept. 6.

1934.

1 ♀ *Heptamelus* at table light.

1 ♀ *Pseudoscorpion* to dryer lantern

1 *Blattella* in my tent.

2 mantids to table light.

9 species of *Tettigoniids* to
table light, driver light &

in 4 T. G. tent
Triod. bipunctatus in my tent
Arthropods 16 + 2465 = 2481

Other ins. 57 + 2862 = 2899

1934.111 As 1934.105 but
Sept. 1, 1934 at light at night.

Scutigerella at G. B. mess table.

Phrynosoma in a bunch of bananas
hanging under our p. roof.

Theropoda in my tent.

Tettigoniids all at driver light

Microgryllus on wall of beehive.
in light of air lantern.

Gryllus + Scapsipedus in my
tent.

Orth. 9 + 2481 = 2490

Orth. no. 11 + 2899 = 2910

1934.112 to 1934.105 but Sept.
8, 1934. Working in small clearings
cut in to the forest and the margin
zone of the same areas.

Long-pron. tettigid usually on
bush-land foliage. Short-pron.

tettigid on same but more
usually on low ground cover.

Juv. Mantis on foliage.

Epistaurus on low foliage

1 Coptera ditto.

Campopromachus very active, jumping
long distances, usually keeping
low.

Microgryllus a Catantops (?) in
foliage of medium height -
active. Psalmodes near tents
in tall weeds.

All tettigids except Cono-
cephalus on foliage, latter on
grass /

1 *Cucanthus* 1 ♀ on foliage.

1 *T. humilis* on foliage.

Arth. 28 + 2490 = 2518

Other ins. 33 + 2910 = 2943

1934. 113 As 1934. 105 but
Sept. 8, 1934 at light at
night.

Psathia + *Ephedra* at dinner
table.

Phanographia ditto

Pseudophylla ditto

Lythrum in wall of building.

Cyrtosiphia (?) in my tent.

Arth. 7 + 2518 = 2525

Other ins. 50 + 2943 = 2993

1934. 114 As 1934. 105 but
Sept. 9, 1934. On bushes white
flourishing along front edge.

Arth. 1 + 2525 = 2526

Other ins. 3 + 2993 = 2996

1934. 115 As 1934. 114 but
bright from natives

Arth. 0 + 2526 = 2526

Other ins. 7 + 2996 = 3003

1934.116 As 1934.114 but
Sept. 9, 1934 at light at night.

All Orth. exc. pygid at mess,
Oxytelus running on ground, also *letting*
latter in my tent. *Thelyphorus*

Orth. 5 + 2526 = 2531
Other ins. 9 + 3004 = 3013

1934.117 As 1934.114 but
Sept. 7-9, 1934. Taken by Baron
& Blixen at camp about 2 hours
away in forest.

✓ Orth. 2 + 2531 = 2533
Other ins. 24 + 3013 = 3037

1934.118 As 1934.114 but
Sept. 10, 1934. Bought from
native children.

Orth. 0 + 2533 = 2533
Other ins. 49 + 3037 = 3086

1934.119 As 1934.114 but
Sept. 10, 1934. Beating, sweeping
& picking along road margin
of forest, examining vine mounds,
fallen trunks, rice patches,
etc.

Medinophyllon on bark of rotting
log in tangled clearing.
Trachylobius very few, along roadside
on dry ground.

very dense before very common
in tangled clearing, on ground
in low plant cover - even in
low rice + prairie, general in
that environment.

blurred - only in taller cover on
forest edge.

Heteropterus in tangled clearing,
not on ground.

Atractodes in heavy cover along
forest edge.

Flies from cyrtus, on foliage
in same place.

Kevinia? (18) ditto.

Epitriptus, (1) "

Catantops - *Stenobothrus* more
frequent in detritus. on forest + fringe
- in tangled clearing.

Phaenopterus on forest border
fringe.

both . 81 + 2533 = 2614

Other vis . 32 + 3086 = 3118

1934. 120 As 1934. 114 but Sept.

10, 1934. Brought from water, except one north taken at night at light. (Copepod. - 8 spec)

Crust. 2 + 2614 = 2616

Water ins. 15 + 3118 = 3133

1934. 121 As 1934. 114 but

Sept. 11, 1934. Brought from water by 10 or taken immediately at night used as north station.

Crust. 2 + 2616 = 2618

Water ins. 96 + 3133 = 3229

1934. 122 As 1934. 114 but

Sept. 11, 1934 At light at night.

Centipede - Siphon at mess tent light. on tent. Beautiful slender

Phaeocephalid dingo. Encoptrid in my tent. (Microcentrid brought in)

Crust. 5 + 2618 = 2623

Water ins. 27 + 3229 = 3256

1934. 123 As 1934. 114 but

Sept. 12, 1934. Brought in by 1 brought from water.

3 species of cyclopoida, Periphanes.

Crust. 14 + 2623 = 2637

Water ins. 67 + 3256 = 3323

1934. 124 As 1934. 114 but
Sept. 12, 1934 at night at
light.

2 *Aliphatys* & 1 ♀ *Thalassoma* (or? *Aliphatys*) on meso
table.

3 *Amorphosalis* resting on inside of
meso fly. (1 species? - *Amorphosalis* very diff.)
Scattered little.

2 *Thalassoma* little.

Suprapinnatus in my tent. active.

No *Tridactylus* on meso table very
active.

Orth. 13 + 2637 = 2650

Uther no. 37 + 3323 = 3360

1934. 125 As 1934. 114 but
Sept. 12, 1934 caught from
waters, or caught in camp
etc. as below shown.

Theopompa alongside of dinner
lantern in morning.

Euprepona in tangle of
climbing near forest.

Aliphatys in light in AM.

Orth. 14 + 2650 = 2664

Uther no. 67 + 3360 = 3427

1934. 126 As 1934. 114 but
Sept. 13, 1934 at light at
night.

~~But~~ Symphora, Lijerpes - Amorpho-
dellus in mass tent fly. Alexcolo-
gama running on ground in
thine. Unusual galled in
mass fly.

Arth. 5 + 2664 = 2670
Other ins. 32 + 3427 = 3459

1934. 127 As 1934. 114 but
Sept. 14, 1934, picked up in
forest while bird moving.

Phrygid caught by my.
Amorphocella should be 18426.
Adontmela in two underground.

Arth. 3 + 4670 = 2673
Other ins. 4 + 3459 = 3463

1934. 128 As 1934. 114 but
Sept. 14, 1934, brought from
natives.

Arth. 32 + ²⁶⁷³~~67~~ = 2705
Other ins. 103 + 3463 = 3566

1934. 128 Continued

1934. 125 Continued
same as same date
other data

$$\text{Orth. } 13 + 2705 = 2719$$

$$\text{Other ins. } 116 + 3566 = 3682$$

1934. 129 As 1934. 14 but Sept.
24, 1934 at light at night

$$\text{Orth. } 3 + 2117 = 2122$$

$$\text{Other ins. } 12 + 3672 = 3684$$

1934. 130 Ube, 5m. N. of
Napoko Ferry, Aonani-Hiangua
Road, Hale West, Polyn. Group.

Elev. 2800 feet. Sept. 17,

1934. Bright from sunrise
unless otherwise indicated

Range work at light at night.

$$\text{Orth. } 13 + 2722 = 2735$$

$$\text{Other ins } 78 + 3694 = \begin{array}{r} 3697 \\ 3601 \end{array}$$

1934. 131 Same as 1934. 130
but Sept 19, 1934. In tall grass
Capeensis - Polypotota.

$$\text{Orth. } 2 + 2735 = 2737$$

$$\text{Other ins. } 0 + 3601 = 3601$$

1934.132 As 1934.130 Bought
from natives Sept. 18-19 except
moths, which were at light
night 4 Sept. 18.

$$\text{Cuth. } 2 + 2707 = 2939$$
$$\text{Other ins. } 42 + 3601 = 3643$$

1934.133 As 1934.130 Bought
from natives Sept. 19, 1934
except Symplegid - large ant.
which were in my tent at
night

$$\text{Cuth. } 4/07 + 1 = 2940$$
$$\text{Other ins. } 12 + 3643 = 3655$$

1934.134 As 1934.130 but
Sept. 20, 1934. Bought from
natives exc. moths taken ^{at light}
at night.

$$\text{Cuth. } 0 + 2940 = 2940$$
$$\text{Other ins. } 12 + 3655 = 3667$$

1934.135 Bomokandi Ferry
on Bomokandi River, near
Runge, Uele, Belg. Congo.
Sept. 21, 1934. Elev. 2350
feet.

$$\text{Cuth. } 0 + 2940 = 2940$$
$$\text{Other ins. } 6 + 3667 = 3673$$

1934. 136 Ekhitendo, betw.
Kringba + Dzungu, Uele, Belg.
Congo. Sept. 22, 1934. Elev. 2650 feet.

Bought from natives or picked
up immediately about camp.

$$\text{Arth. } 10 + 2940 = 2950$$

$$\text{Other ins. } 36 + 3673 = 3709$$

1934. 137 As 1934. 136 but

Sept. 23, 1934.

Large beetles + acridid bought from
natives. Others all at light at
night.

$$\text{Arth. } 2 + 2950 = 2952$$

$$\text{Other ins. } 15 + 3709 = 3724$$

1934. 138 As 1934. 136 but

Sept. 24, 1934. Bought from
natives, or picked up about with quantities
unless otherwise
indicated.

$$\text{Arth. } 4 + 2952 = 2956$$

$$\text{Other ins. } 18 + 3724 = 3742$$

1934. 139 As 1934. 136 but

Sept. 25, 1934. Beating.

Swinging - picking along
native trails among oil palm
groves, tall grass, tangles
about manure and also the

jungle edge of some tree
clumps - south of these
trails almost impassible on
account of the tall grass (5-6
feet).

Hiapnastrifex swept from foliage

Theganopteryx " " "

Mantid " " "

Ptiligids in short grass & also
ground of trail.

Blennid. in grass - usually
shorter.

Orthosternum - foliage eating
under low trees.

Acrida Fungled vines.

Amorocryptus - as Orthosternum

Paracoptera - little

Amorocryptus lush grass.

Phanacopteryx " "

Cuscutha vine Fungled

Acrida lush grass.

Orth. 47 + 2956 = 3003

Other inv. 75 + 3742 = 3817

1934. 140 As 1934. 136 but
Sept. 25, 1934. Brought from
nabins.

Orth. 2 + 3003 = 3005

Other ins. 8 + 3827 = 3835

1934. 141 As 1934. 136 but
Sept. 25, 1934, at light at
night

~~Hesperia~~, *Hesperia*, *Hesperia*
+ mantids at mess table.

Blattella in my tent.

Orth. 9 + 3005 = 3014

Other ins. 94 + 3825 = 3919

1934. 142 As 1934. 136
but Sept. 26, 1934, brought from
nabins.

Orth. 5 + 3014 = 3019

Other ins. 33 + 3919 = 3952

1934. 143 As 1934. 136
also Sept. 26, 1934, but taken
at light at night (all)

Orth. 12 + 3019 = 3031

Other ins. 68 + 3952 = 4020

1934. 144 As 1934. 136

but Sept. 27, 1934 bought from
natives.

Grth. $14 + 3031 = 3045$

Other no. $115 + 4020 = 4135$

1934. 145 As 1934. 136 but

Sept. 27, 1934 at light at night
at mass table.

Pyromantis on ground - There
as above.

Grth. $3 + 3045 = 3048$

Other no. $22 + 4135 = 4157$

1934. 146 As 1934. 136 but

Sept. 25, 1934. Bought from
natives.

Grth. $116 + 3045 = 3164$

Other no. $303 + 4157 = 4460$

1934. 147 As 1934. 136 but Sept.

27, 1934. Bought from natives.

Grth. $214 + 3164 = 3378$

Other no. $332 + 4460 = 4792$

1934.148 As 1934.136 but
Sept. 30, 1934 at light at
night.

Amphibia, *gyllis* & *Sphodro-*
mantis

$$\text{Orth. } 3 + 3378 = 3381$$

$$\text{Other ins. } 2 + 4192 = 4194$$

1934.149 As 1934.136 but
Sept. 30, 1934. Bought from
natives.

$$\text{Orth. } 215 + 3381 = 3596$$

$$\text{Other ins. } 257 + 4194 = 5051$$

1934.150 As 1934.136 but
Oct. 1, 1934. Bought from
natives.

$$\text{Orth. } 723 + 3596 = 3999$$

$$\text{Other ins. } 314 + 5051 = 5365$$

1934.151 As 1934.136 but
Oct. 1, 1934 at light at
night.

$$\text{Orth. } 3 + 3999 = 4002$$

$$\text{Other ins. } 3 + 5365 = 5370$$

1934.152 As 1934.136 but
Oct. 3, 1934 at night at
light.

Orth. 2 + 4004 = 4006
Other ins. 3 + 5370 = 5373

1934.153 As 1934.136 but

Oct. 4, 1934. *Hemimimus*
from 2 *Cricetomys* (no.

997-998) Both with 15 to 20 but
former badly infested with
same, latter not so much.

Hemimimus generally
distributed. (Not in
alcohol)

Orth. 45 + 4006 = 4051
Other ins. 0 + 5373 = 5373

1934.154 As 1934.136 but
Oct. 3, 1934. Bought from
natives.

Orth. 405 + 4051 = 4456
Other ins. 393 + 5373 = 5766

1934.155 as 1934.126
but Sept. Oct. 5, 1934.
Mantis at night at night.

With 1 + 4456 = 4457
Other no 0 + 5766 = 5766

1934.126 as 1934.126 but
Oct. 6, 1934. These specimens
from Christmas night in
same date.

With 3 + 4457 = 4460
Other no 0 + 5766 = 5766

1934.157 Not S. Trut. Ubangi,
French Eq. Afr. Oct. 13, 1934.
Elev. 1375 feet. Bought from
natives.

With 446 + 4460 = 4906
Other no 227 + 5766 = 5993

1934.158 Same loc. as
1934.157, but Oct. 10,
1934. Bought from
natives.

With 56 + 4906 = 4962
Other no 365 + 5993 = 6358

1934.159 As 1934.157 but

Oct. 16 About house, except
moths - mayflies taken at
night.

Weth. 0 + 4962 = 4962

Other ins. 9 + 6358 = 6367

1934.160 As 1934.157 but

Oct. 16 Brought from natives.

Weth. 92 + 4962 = 5054

Other ins. 49 + 6361 = 6416

1934.161 As 1934.157 but

Oct. 17, 1934. At light at
night. Hymenoptera at house here.
Beetle & *Chalcid* in myriads
not of bed.

Weth. 1 + 5054 = 5055

Other ins. 2 + 6416 = 6418

1934.162 As 1934.157 but

Oct. 17, 1934. Brought from
natives.

Weth. 40 + 5055 = 5095

Other ins. 117 + 6418 = 6535

1934.163 As 1934.15, but
Oct. 18, 1934. Brought
from natives.

cents $21 + 5095 = 5116$

lesher no 2 + 6500 = 650

1934. 104 Kola, Sanga River,
Niger Congo, French Eq. Africa
Elev. 1000 feet. X. 24. 1934.

In one corner under an abandoned
cacao plantation. ^{with} ^{the} fringe only.
Wasp under some veranda - pydams.
1 with 9 + 5716 = 5725

Answer No. $2 + 6531 = 6533$

Ventral surface of *Coloposoma*
abdomen vivid greenish
yellow.

1934.165 As 1934.164 but
Oct. 25, 1934. Bought
from native ex. sphinx
taken in my room

$$\text{Ans. } 67 \div 25 = 5133$$

Quinn's 1 + 6529-6540

1934.166 As 1934.164 but
Oct. 27, 1934. *Zonura*
purchased from natives,
Abnampsa running on very
mud table.

$$\text{Birth } 24 + 5753 = 5777$$
$$\text{Other no. } 0 + 6540 = 6540$$

1934.167 As 1934.164 but
Oct. 27, 1934. Creeping in tall
grass along river bank and over
wet thicket grass along same.

Marchelia up in tall grass.

all, Aridids etc. *Pittigids*
+ all *Pittigrids*, as well as

Urocentrus in same. *Pittigrids* ✓

Large ant like *Urocentrus* *Pittigrids* ✓

$$\text{Birth. } 55 + 5151 = 5206$$

$$\text{Other no. } 33 + 6540 = 6573$$

1934.168 As 1934.164 but
Oct. 27, 1934. Bought from natives

$$\text{Birth. } 69 + 5212 = 5281$$
$$\text{Other no. } 19 + 6573 = 6592$$

1934. 169 As 1934. 164 but
Oct. 28, 1934 at light at
night in moss-shelter.

$$\text{Arth. } 6 + 5281 = 5287$$

$$\text{Other ins. } 14 + 6592 = 6606$$

1934. 170 As 1934. 164 but
Oct. 29, 1934. Butterflies taken
in forest by B. V. Bliven & Visc.
Pachyneuridae.

$$\text{Arth. } 0 + 5281 = 5281$$

$$\text{Other ins. } 12 + 6606 = 6618$$

1934. 171 As 1934. 164 but
Oct. 29, 1934. Brought from
natives.

$$\text{Arth. } 550 + 5281 = 5837$$

$$\text{Other ins. } 16 + 6618 = 6634$$

1934. 172 As 1934. 164 but
^{Oct.} Nov. 30, 1934. Butterflies
taken by B. V. Bliven in the
forest.

$$\text{Arth. } 0 + 5837 = 5837$$

$$\text{Other ins. } 37 + 6634 = 6671$$

1934.173 Do 1934.164 but
Oct. 30, 1934. Brought from
matrons.

Orth. $185 + 5857 = 6022$

Other ins. $4 + 6671 = 6675$

1934.174 Do 1934.164 but
Oct. 30, 1934. Taken at light
at night.

Diaparsus - removed at
mess table light.

Orth. $6 + 6022 = 6028$

Other ins. $20 + 6610 = 6630$
 6675

1934.175 Do 1934.164 but
Oct. 31, 1934. Butterflies
taken in front of table.

Orth. $0 + 6028 = 6028$

Other ins. $20 + 6695 = 6715$

1934.176 Do 1934.164 but
Oct. 31, 1934. Taken by natives.

Orth. $86 + 6028 = 6114$

Other ins. $3 + 6715 = 6718$

1934.177 Do 1934.164 but
Oct. 31, 1934 at mess table light
at night.

Orth. $3 + 6114 = 6117$

Other ins. $9 + 6718 = 6727$

1934. 178 As 1934. 164 but Nov.

1, 1934. Butterflies taken by
Sulsh.

$$\text{Orth. } 0 + 6117 = 6117$$
$$\text{Other ins. } 10 + 6127 = 6137$$

1934. 179 As 1934. 178

but at night at light.

Oryzalis running in grass
of mess shelter. All the orthopt.
running in mess.

$$\text{Orth. } 9 + 6117 = 6118 - 6127$$
$$\text{Other ins. } 32 + 6137 = 6169$$

1934. 180 As 1934. 178

but brought from outside.

$$\text{Orth. } 62 + 6128 = 6189$$
$$\text{Other ins. } 11 + 6169 = 6180$$

1934. 181 As 1934. 178 but

Nov. 2, 1934. At night at
light.

Pyrops, Rhantodonta
+ large biting insect at
mess lights.

$$\text{Orth. } 3 + 6189 = 6192$$
$$\text{Other ins. } 1 + 6180 = 6181$$

1934.182 As 1934.178 but
Nov. 3, 1934. Taken while
working in forest for birds.
Arrived in morning.

Orth. 1 + 6176 = 6177
Other ins. 1 + 6181 = 6182

1934.183 As 1934.178 but
Nov. 2, 1934. Bought from
natives.

Orth. 339 + 6177 = 6532
Other ins. 28 + 6182 = 6810

1934.184 As 1934.178 but
Nov. 3, 1934. Taken at night
at light of mess table.

Orth. 2 + 6532 = 6534
Other ins. 3 + 6810 = 6813

1934.185 As 1934.178 but
Nov. 4, 1934. Picked up about
camp.

Orth. 2 + 6534 = 6536
Other ins. 1 + 6813 = 6814

1934.186 As 1934.178 but
Nov. 3, 1934. Bought from natives.

Orth. 70 + 6536 = 6606
Other ins. 17 + 6814 = 6831

1934. 181 As 1934. 118 but
Nov. 5, 1934. Bought from
natives

With 48 + 6656 = 6704

Other no. 17 + 6848 = 6865

1934. 188 As 1934. 118 but
Nov. 4, 1934. At night at moss
bark lights.

With 2 + 6654 = 6656

Other no. 13 + 6848 = 6861

1934. 189 Aoungouru, 15 m. N.
of Nola, Moyen Congo, French
Cognat. Africa. Elev. 2060
feet. Nov. 7, 1934

Purchased from natives

With 96 + 6656 = 6752

Other no. 18 + 6861 = 6879

1934. 190 As 1934. 189 but
Nov. 8, 1934. Purchased
from natives.

With 108 + 6752 = 6860

Other no. 17 + 6879 = 6896

1934.191 Yandu, Cameroons.

2000 Oct + Nov. 14, 1934.

Wright at light in hotel on
wells.

Wright. $6 + 6860 = 6866$

Other was. $4 + 6896 = 6900$
